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Gas Househeating survey: 1981

PRESENT AND PROSPECTIVE HOUSEHEATING CUSTOMERS

AGA
American Gas Association

GAS HOUSEHEATING SURVEY: 1981

34th Annual Survey
Gas Utility Industry
United States

Househeating Customers, 1981
Unit Additions—Conversions and New Housing, 1981-1982
Gas Utility Customer New Hook-Up Requirements, 1981
Competitive Fuel Prices, 1981

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Introduction

This report presents the results of the 34th annual Gas Househeating Survey conducted by the American Gas Association. Data collected for 1981, as well as projected data for 1982, provide a comprehensive portrait of the residential gas market by state and region, including customers, fuel prices, anticipated inventory additions from new homes and conversions, and existing restrictions on new customer hook-ups.

A total of 160 gas utility companies, serving 87% of the nation's residential gas customers, responded to this year's survey. The information provided by these utilities was expanded to obtain the state and national totals shown in Tables 4 and 6. Individual company data are listed by region and state in Appendices 1 and 2. Please note that some tabular data may not add to totals due to rounding.

The American Gas Association wishes to thank those companies who participated in the survey for making this publication possible.

I. Executive Summary

- There were 44.3 million residential gas customers by year-end 1981, an increase of 1.4% over 1980. Of this total approximately 88%, or 39.2 million, were house-heating customers.

- Natural gas continued to be the leading househeating fuel in the United States, with about 56% of the home heating market in 1981. Fuel oil dropped to 18%, electricity remained at 18%, while all other fuels (wood, coal, etc.) remained constant at 8%. In the new housing market, gas' share of single and multifamily unit completions rose to 38% from 37% in 1980 while electricity's share declined to 55% from 56%.

- Regionally, gas-heated housing is most prevalent in the North Central states, maintaining a 71% share of the market. In the Northeast region, gas increased its share to 41% in 1981, up from 37% in 1977. In all regions except the Northeast, gas had the largest market share of heated homes.

- The addition of new gas househeating units from conversions of existing units and new housing combined totalled 912,500 in 1981 to reach a total of 45 million gas heated units, an increase of 1.4% over 1980. This includes both single and multifamily units.

- Conversions from alternative fuels to gas househeating reached 451,600 in 1981, the second highest recorded actual level in a single year. A record 583,000 conversions occurred last year. Additions from new housing numbered 460,892 in 1981, only a 9% decline from the 1980 level of 507,200, which was less than the percentage decrease in the total number of new housing units built. The number of single and multifamily units completed - 1.3 million during 1981 - was down 16% from 1980, reflecting the nationwide slump in the housing industry.

- Based on survey data, 389,869, or 86% of all heating conversions, were from fuel oil to gas. Regionally, 97% of all conversions in the New England and Middle Atlantic regions were from fuel oil to gas, 96% in the South Atlantic region, and 70% in the Pacific region. The remaining conversions to natural gas were 29,789 converting from LPG, 14,117 from electricity and 17,837 from "other fuels" (i.e., coal, wood, etc.).

- Utility estimates for 1982 indicated that the number of conversions was expected to decline to approximately 303,800 units. While this projection is for a conversion level lower than the previous three years, it is higher than the levels that prevailed during the period of restrictions in the 1970s.

- In 1981, several utilities reported some form of new hook-up requirements (or restrictions), primarily conservation-oriented and main extension requirements. For example, some new customers were required to meet minimum insulation or structural standards set by state authorities. Other customers were required to receive the appropriate surcharge to cover the financing of the main extension. In all reporting companies, however, new customers were still added.

- Shipments of gas warm air furnaces declined slightly in 1981, down 2%, compared to a 22% decline in 1980 from the previous year. Gas boiler shipments, however, were off 45% in 1981, while gas wall and floor furnace shipments fell 36% and 14%, respectively. Electric warm air furnace shipments increased slightly (3%) in 1981. Shipments of oil warm air furnaces increased 28% in 1981 after declining 60% in 1980, while oil boiler shipments increased 31% after a 39% decline the previous year. Thus, total manufacturers' shipments of residential heating equipment declined 4% in 1981, while shipments of gas heating equipment declined 12% compared to 1980. This decline in equipment shipments reflects, in part, the decrease in housing starts from 1.3 million units in 1980 to 1.1 million units in 1981.

II. United States Housing Market in 1981

Existing Housing

There were an estimated 80.9 million occupied housing units in the United States in 1981, a 1% increase over 1980. Of this total, 45 million, or 56%, were units which used natural gas for heating (see Table 1). A regional breakdown of the 45 million gas heated units found 16% in the Northeast, 33% in the North Central, 28% in the South, and 23% in the West.

Between 1977 and 1980 the number of gas househeating units in the United States grew at an annual rate of about 1.6%, a growth rate restrained primarily by the prevalence of new gas hook-up restrictions which limited or set conditions for residential load growth. The 1981 figure of 45 million gas heated units was a 1.4% increase over the 1980 total, a slight decline in the annual growth rate, although gas' market share has actually increased slightly due to a slower growth rate for electric heated housing last year and a continued decline in oil heated housing.

As a percentage of total homes, electrically heated units continued to remain around 18% in 1981 with a total of 14.8 million units. This is an average annual increase of 5.8% since 1977. The number of units heated with fuel oil continued to decline, falling to 14.5 million in 1981, or 18% of the total. The number of homes heated by other fuels (wood, coal, solar, etc.) has maintained a steady 8-9% market share for the past 5 years, totalling just over 6.6 million units again in 1981.

Table 1

TOTAL U.S. RESIDENTIAL HOUSING BY HEATING FUEL
1977-1981
(Thousands of Occupied Units[a])

	Actual				Estimate	
	1977	1978	1979	1980	1981	1981 Market Share
United States	75,279	77,167	78,572	80,073	80,900	100
Gas	41,543	42,522	43,322	44,398	45,000	56
Electric	11,146	12,258	13,244	14,207	14,800	18
Oil[b]	16,059	16,072	15,708	14,867	14,500	18
Other[c]	6,531	6,315	6,298	6,601	6,600	8

[a] Units include both single and multifamily.

[b] Oil includes kerosene.

[c] Other includes LP gas, coal, wood, solar, and none.

Source: U.S. Bureau of the Census, Annual Housing Survey: General Housing Characteristics, 1977-1980. A.G.A. estimate for 1982 derived by adding number of dwellings completed by fuel type, as reported by U.S. Bureau of Census, Construction Reports - Series C-25, July 1982, to 1980 actual data, considering also the net gains and losses as a result of fuel switching and demolitions.

In all regions except the Northeast, gas had the largest market share of heated homes. Gas heated housing is most prevalent in the North Central states, maintaining a 71% share of the market. In the Northeast region, where oil heated homes are dominant, gas increased its market share to 41% in 1981 (see Table 2), up from 37% in 1977.

New Housing

Natural gas has traditionally added the majority of new customers through new housing construction. However, the continued downturn in new home and apartment construction has limited market growth.

The number of new housing starts in 1981 fell to 1.1 million units, a 16% decline from 1980 (see Figure 1). Construction of single family homes dropped almost 17% to 705,000, while the construction of multifamily units fell 14% to 379,000.

Wharton Econometric Forecasting Associates (WEFA) has predicted that 1982 starts would remain around 1.0-1.1 million units, an optimistic forecast compared to Bureau of Census preliminary data, which showed actual housing starts declining by 21% through July 1982 compared to the same period in 1981.1/ WEFA expects the housing market to begin a gradual recovery over the following two years, with starts nearing 1.4 million in 1983 and 1.7 million in 1984.

The housing industry slump is further evidenced by a decline in the number of unit completions,2/ which lag housing starts by about 6 months, to 1.3 million in 1981, a decrease of 16% compared to 1980 (see Table 3). However, over the same period gas' (including LPG) share of new units actually rose from 37% to 38%, while the percentage of new units using fuel oil fell from 3% to 2%. Electricity declined slightly to a 55% share, while units using other fuels increased from 4% to 5%. Continued competition from electricity, especially the electric heat pump, has prevented gas heating from regaining the dominant position in the new housing market it held in the 1960s and early 1970s. However, renewed marketing efforts by gas utilities, increased supply availability and the introduction of new, high efficiency gas furnaces and boilers (i.e., seasonal efficiencies of up to 96% versus 60% for conventional equipment), will enable gas to compete effectively against electricity in the future.

1/ Source: U.S. Department of Commerce, Bureau of Census, Construction Reports - Housing Starts, July 1982, Series C-20.

2/ A house is defined as completed when all finished flooring has been installed (or carpeting if used in the place of finished flooring). If the building is occupied before all construction is finished, it is classified as completed at the time of occupancy. In privately owned buildings with two or more units, all the units are counted as completed when 50% or more are occupied or available for occupancy.

Table 2

REGIONAL HEATING FUELS AND
MARKET SHARES FOR RESIDENTIAL HOUSING, 1977-1981

(Thousands of Occupied Units[a])

Region and Fuel	Actual				Estimate	
	1977	1978	1979	1980	1981	1981 Market Share
Northeast	16,637	16,952	17,123	17,264	17,300	100
Gas	6,151	6,301	6,558	6,928	7,100	41
Electric	958	999	1,109	1,169	1,200	7
Oil[b]	9,103	9,253	9,056	8,685	8,500	49
Other[c]	425	399	400	482	500	3
North Central	19,856	20,171	20,565	20,842	20,900	100
Gas	13,893	14,140	14,428	14,688	14,800	71
Electric	1,506	1,685	1,864	2,036	2,100	10
Oil[b]	2,843	2,817	2,724	2,502	2,400	11
Other[c]	1,614	1,529	1,549	1,616	1,600	8
South	24,379	25,094	25,585	26,286	26,800	100
Gas	11,577	11,956	12,054	12,290	12,500	47
Electric	6,033	6,561	7,074	7,615	8,000	30
Oil[b]	3,335	3,263	3,191	3,009	2,900	11
Other[c]	3,434	3,314	3,266	3,372	3,400	12
West	14,407	14,950	15,299	15,681	15,900	100
Gas	9,922	10,125	10,283	10,492	10,600	67
Electric	2,649	3,013	3,197	3,388	3,500	22
Oil[b]	778	739	737	671	700	4
Other[c]	1,058	1,073	1,082	1,130	1,100	7

[a] Units include both single and multifamily.

[b] Oil includes kerosene.

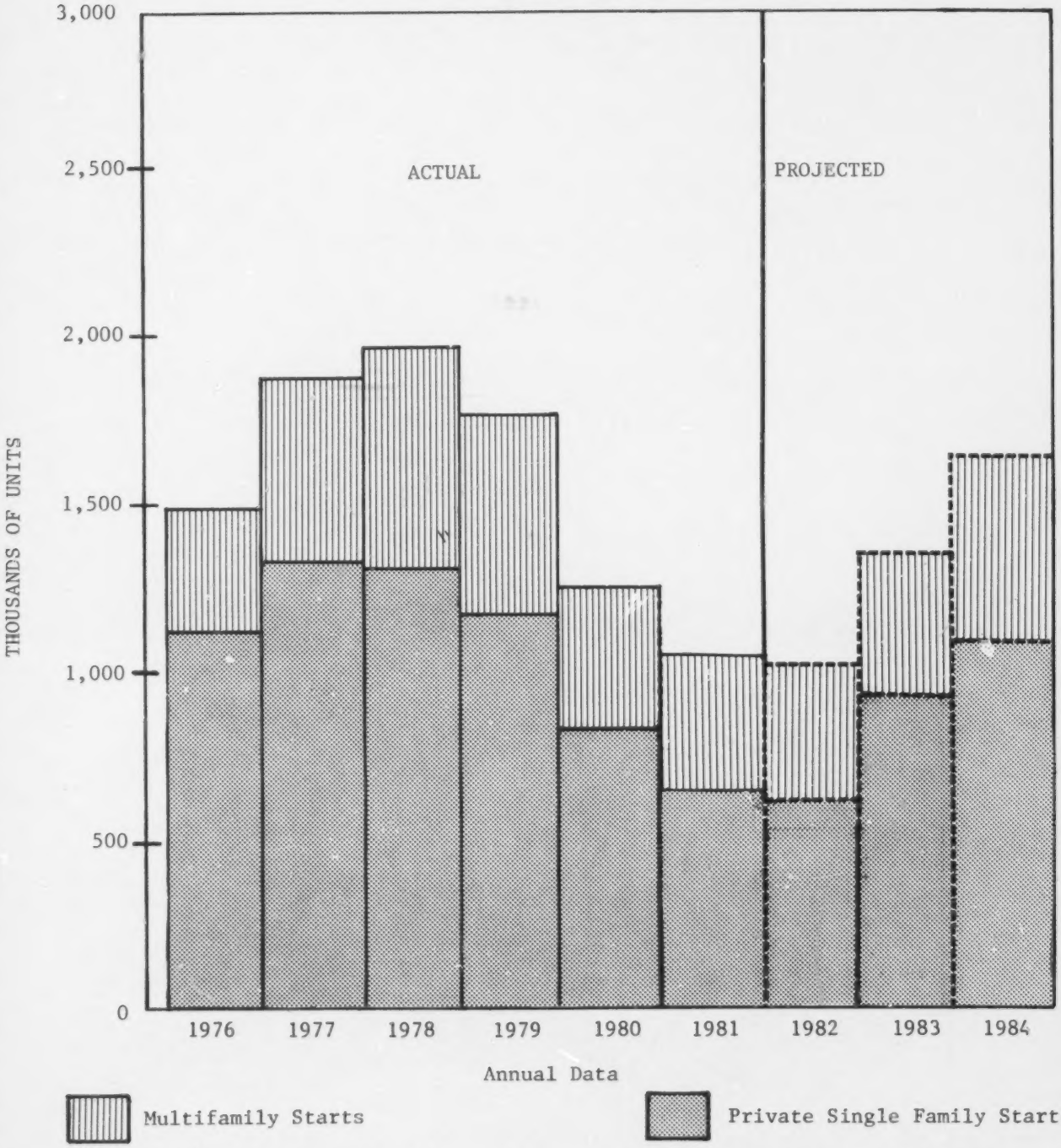
[c] Other includes LP gas, coal, wood, solar, and none.

Source: U.S. Bureau of the Census, Annual Housing Survey: General Housing Characteristics, 1977-1980. A.G.A. estimate for 1981 derived by adding number of dwellings completed by fuel type, as reported by U.S. Bureau of Census, Construction Reports - Series C-25, July 1982, to 1980 actual data, considering also the net gains and losses as a result of fuel switching and demolitions.

Figure 1

NEW RESIDENTIAL HOUSING STARTS ACTUAL AND PROJECTED

1976-1984



Source: Actual--U.S. Bureau of the Census, Construction Reports-Series C20, Housing Starts, July 1982.

Projected--Wharton Econometric Forecasting Associates Long Term Model, Baseline Forecast, October, 1982.

Table 3

RESIDENTIAL HOUSING COMPLETIONS BY HEATING FUEL TYPE 1977-1981
(Thousands)

Heating Fuel Type	1977		1978		1979		1980		1981	
	Number	%	Number	%	Number	%	Number	%	Number	%
Total Completions[a]	1,657	100	1,869	100	1,870	100	1,502	100	1,265	100
Electricity	896	54	1,049	56	1,048	56	844	56	700	55
Gas[b]	591	36	642	35	662	35	559	37	481	38
Oil[c]	138	8	133	7	113	6	41	3	23	2
Other or None	32	2	45	2	47	3	58	4	61	5

[a] Includes both single and multifamily units.

[b] Includes Liquefied Petroleum Gas, estimated to be about 6% of total gas completions.

[c] Includes kerosene.

Source: Bureau of Census, Characteristics of New Housing: Series C-25, 1977-1981, July 1982.

III. Residential Gas Customers in 1981

Total Residential Customers

With net customer additions of 605,900, the total number of gas customers[3/] exceeded 44.3 million in 1981, a 1.4% increase over 1980 (see Table 4). Two regions, the South with 242,300 new customers and the West with 181,600 new customers accounted for 70% of all new residential customer additions.

Househeating Customers

About 39.2 million, or 88.3% of all 1981 residential customers were househeating customers, an increase in the househeating/total residential customer ratio of one half of one percentage point over 1980. In spite of the slowdown in the housing industry, househeating customer net additions totalled 773,600 in 1981. This included existing gas baseload customers who converted their heating system to gas, as well as customers added through new construction and conversions from alternative fuels. The strength of the conversion trend, a steadily improving gas supply picture, and the lessening of hook-up restrictions, have all played important roles in improving the gas househeating market in 1981.

Gas Househeating Unit Additions

The gas industry added 912,500 househeating units in 1981 (see Table 4), a 16% decline from 1980. Of total additions, 51%, or 460,900 were from new housing,[4/] a decrease in actual units from 1980 due to the decline in the housing industry, although it does represent an increase in the share of househeating additions from new housing to 51% from 47% in 1980. However, the sunbelt states continued to grow, with the West region alone accounting for 42% of new househeating unit additions. Accordingly, the West showed the highest ratio of additions from new housing versus conversions, 91%, whereas the Northeast showed only 16% from new housing.

In 1981, 451,612 housing units were converted from an alternative fuel to natural gas (see Table 4), the second highest recorded actual level of conversions reported in a single year. This represents a 23% decrease from the record 1980 level of

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3/ At most utilities a residential customer is defined as an individual or organization purchasing gas for domestic purposes (heating, cooking) at one location under one rate classification, i.e., a meter represents a single customer.

4/ Because of inconsistencies in the definition of a completed housing unit (used by the Bureau of the Census) and an on-line gas customer (used by a gas utility), the number of gas heated housing units added from new construction reported in the survey does not match the Census figures shown in Table 3.

Table 4

RESIDENTIAL AND HOUSEHEATING CUSTOMERS OF GAS UTILITIES,
AND 1981 HOUSEHEATING UNIT ADDITIONS,
BY STATE, AS OF DECEMBER 31, 1981

(Thousands)

Region, Division and State	Residential Customers			1981 Househeating Unit Additions From New Housing and Conversions				
	Total	House Heating	Percent Heating	Total (100%)	New Housing Number	New Housing (%)	Conversions Number	Conversions (%)
UNITED STATES	44,324.1	39,151.6	88.3	912.5	460.9	51	451.6	49
NORTHEAST	9,177.2	5,722.7	62.4	242.7	39.6	16	203.1	84
New England	1,677.3	1,104.9	65.9	37.8	6.6	17	31.2	83
Connecticut	380.6	243.4	63.9	15.1	2.7	18	12.4	82
Maine	12.9	9.2	71.3	2.5	0.2	8	2.3	92
Massachusetts[a]	1,065.2	696.4	65.4	15.7	3.0	19	12.7	81
New Hampshire[a]	45.2	36.0	79.6	1.9	0.6	32	1.3	68
Rhode Island	159.2	108.2	67.9	2.2	b	b	2.2	b
Vermont	14.2	11.7	82.4	0.4	0.1	30	0.3	70
Middle Atlantic	7,499.9	4,617.8	61.6	204.9	33.0	16	171.9	84
New Jersey	1,695.9	1,000.5	59.0	59.9	12.8	21	47.1	79
New York	3,587.0	1,785.7	49.8	103.7	9.4	9	94.3	91
Pennsylvania	2,217.0	1,831.6	82.6	41.3	10.8	26	30.5	74
NORTH CENTRAL	13,967.3	13,166.9	94.3	213.4	92.2	43	121.2	57
East North Central	10,112.9	9,437.7	93.3	160.7	60.1	37	100.6	63
Illinois	3,046.6	2,674.5	87.8	48.1	17.3	36	30.8	64
Indiana	1,168.6	1,115.8	95.5	28.2	5.8	21	22.4	79
Michigan	2,331.2	2,222.2	95.3	35.4	17.5	49	17.9	51
Ohio	2,587.9	2,555.1	98.7	27.7	15.3	55	12.4	45
Wisconsin	978.6	870.1	88.9	21.3	4.2	20	17.1	80
West North Central	3,854.4	3,729.2	96.7	52.7	32.1	61	20.6	39
Iowa[a]	686.8	663.8	96.6	5.8	5.7	98	0.1	2
Kansas	667.6	663.2	99.3	b	b	b	b	b
Minnesota	768.1	727.7	94.7	26.7	10.6	40	16.1	60
Missouri	1,138.7	1,097.6	96.4	12.4	10.6	85	1.8	15
Nebraska	418.1	409.3	97.9	5.2	4.6	88	0.6	12
North Dakota	79.9	74.7	93.5	0.2	b	b	0.2	b
South Dakota	95.2	92.9	97.6	2.4	0.6	30	1.8	70
SOUTH	10,996.6	10,564.8	96.1	245.8	137.7	56	108.1	44
South Atlantic	3,844.7	3,484.9	90.6	156.2	53.7	34	102.5	66
Delaware[a]	78.4	50.9	64.9	2.1	0.2	9	1.9	91
Dist. of Columbia	133.3	94.7	71.0	20.4	0.5	30	12.4	70
Florida	428.0	398.9	93.2	11.8	10.4	88	1.4	12
Georgia	978.9	977.1	99.8	26.6	25.6	96	1.0	4
Maryland	732.5	566.9	77.4	35.0	3.1	9	31.9	91
North Carolina	355.8	339.4	95.4	16.6	4.2	2	19.9	98
South Carolina[a]	268.9	266.1	98.9	b	b	b	b	b
Virginia	506.9	433.1	85.4	40.7	7.2	18	33.5	82
West Virginia	362.0	357.8	98.8	3.0	2.5	83	0.5	17
East South Central	2,042.9	2,001.3	98.0	20.9	16.9	81	4.0	19
Alabama	630.3	621.7	98.6	10.4	9.0	87	1.4	13
Kentucky	584.5	576.4	98.6	3.7	2.2	59	1.5	41
Mississippi	371.4	371.3	100.0	2.6	2.2	85	0.4	15
Tennessee	456.7	431.9	94.6	4.2	3.5	83	0.7	17
West South Central	5,109.0	5,078.6	99.4	68.7	67.1	98	1.6	2
Arkansas[a]	465.9	464.4	99.7	b	b	b	b	b
Louisiana	919.9	918.8	99.9	b	b	b	b	b
Oklahoma	758.3	750.3	98.9	19.0	18.4	97	0.6	3
Texas	2,964.9	2,945.1	99.3	49.7	48.7	98	1.0	2
WEST	10,183.0	9,697.2	95.2	210.6	191.4	91	19.2	9
Mountain	2,548.2	2,509.1	98.5	63.4	59.8	94	3.6	6
Arizona[a]	541.7	512.6	94.6	8.1	7.9	97	0.2	3
Colorado	770.0	770.0	100.0	24.1	24.1	b	b	b
Idaho[a]	99.4	96.1	96.7	2.3	0.9	39	1.4	61
Montana	165.2	164.5	99.6	b	b	b	b	b
Nevada	167.5	162.0	96.7	7.3	7.0	96	0.3	4
New Mexico	303.7	303.6	100.0	6.4	6.2	97	0.2	3
Utah[a]	385.9	385.9	100.0	11.8	11.2	95	0.6	5
Wyoming	114.8	114.4	99.7	3.4	2.5	73	0.9	27
Pacific	7,634.8	7,188.1	94.1	147.2	131.6	89	15.6	11
Alaska	42.3	41.7	98.6	b	b	b	b	b
California[a]	6,956.3	6,566.8	94.4	125.7	123.7	98	2.0	2
Hawaii	28.5	0.0	0.0	b	b	b	b	b
Oregon	262.9	241.4	91.8	12.6	4.8	38	7.8	62
Washington	344.8	338.2	98.1	8.9	3.1	35	5.8	65

[a] Data not strictly comparable to 1980 due to a change in reporting.

[b] Insufficient data.

583,034 conversions. Due to the intense consumer demand for conversions which began in 1979 and continued through 1981, the actual number of 1981 conversions exceeded the 1980 forecast of 394,500 made by responding companies in early 1981, by 15%. The number of conversions was 49% of all additions to inventory in 1981, down from 53% in 1980, due to both the decline in conversions, and a greater share of new housing completions in 1981.

Approximately 83%, or 375,000 conversions, were from three areas of the country -- the Middle Atlantic, South Atlantic and East North Central divisions. The South Atlantic is the only major division to show an increase in conversions over last year.

The respondents to the 1981 househeating survey were asked to provide a breakdown of the converted units by fuel type (see Table 5). The utilities providing data in this category represent 74% of total 1981 conversions. Based on these data, 389,869 units, or 86%, were conversions from fuel oil to gas. Propane followed with 29,789 units (7%) while electricity and other (e.g., coal, wood, etc.) accounted for 14,117 (3%) and 17,837 units (4%), respectively. Regionally, 97% of all conversions in New England were from fuel oil to gas, with the level at 97% in the Mid-Atlantic region and 96% in the South Atlantic region. The number of conversions from propane was greatest in the East North Central region, although propane conversions comprised the greatest percentage of conversions from all fuel types in the West North Central region. The conversion trend from electric to gas heating in the Pacific Northwest is expected to continue as electricity prices rise rapidly relative to gas in this part of the U.S. Conversions from electricity rose in the Pacific region to 24% of all conversions in the region in 1981 from 12% in 1980.

As part of the 1981 survey, respondents were asked to project additions to the househeating inventory from both new construction and conversions for 1982 (see Table 6). The results indicate that utilities expect to add approximately 303,800 conversions, a level that is lower than the past few years -- but higher than the levels which prevailed during the restrictions of the 1970s. The projection for gas househeating additions from newly constructed units is at 469,137, up slightly from 1981. This means that new housing would account for 61% of total anticipated househeating additions. If total new housing completions continue to decline through 1982, gas' market share of new househeating additions would increase substantially according to this projection.

New Hook-up Requirements

In all, 31 utilities reported some kind of restriction or requirement on hooking-up new customers in 1981. Only two gas companies reported a total, but temporary, moratorium on new customer hook-ups primarily to assess pipeline capacity for meeting peak day demand. Nearly half of the reported restrictions, 14, were conservation-oriented requirements such as minimum insulation or structural standards set by state authorities for new customers. It should be noted that while a "restriction" may

Table 5

HOUSEHEATING CONVERSIONS TO NATURAL GAS IN 1981 BY TYPE OF FUEL

Region	Oil		Propane		Electricity		Other[a]		Total
	Units	%	Units	%	Units	%	Units	%	
United States	389,869	86	29,789	7	14,117	3	17,837	4	451,612
New England	30,440	97	466	1	225	1	94	b	31,225
Middle Atlantic	166,875	97	290	b	884	b	3,818	2	171,867
East North Central	69,230	68	15,922	16	3,832	4	11,668	12	100,652
West North Central	10,357	50	8,951	43	1,298	6	26	b	20,632
South Atlantic	98,862	96	1,944	2	1,379	1	292	b	102,477
East South Central	1,292	32	853	21	1,387	34	511	13	4,043
West South Central	-	b	143	9	869	56	541	35	1,553
Mountain	1,896	53	838	23	471	13	373	11	3,578
Pacific	10,917	70	382	2	3,772	24	514	4	15,585

[a] "Other" includes conversions from coal, wood, etc.

[b] Less than 1%.

Table 6

1982
ANTICIPATED ADDITIONS
OF GAS HOUSEHEATING UNITS

(Thousands)

Region, Division, and State	Total (100%)	New Housing Number	New Housing (%)	Conversions Number	Conversions (%)
UNITED STATES	772.9	469.1	61	303.8	39
NORTHEAST	166.6	33.8	20	132.8	80
New England	24.4	5.2	21	19.2	79
Connecticut	12.5	2.5	20	10.0	80
Maine	1.7	0.2	12	1.5	88
Massachusetts	8.2	1.8	22	6.4	78
New Hampshire	1.4	0.5	43	0.8	57
Rhode Island	0.5	b	b	0.5	b
Vermont	0.1	0.1	100	0.0	0
Middle Atlantic	142.2	28.6	20	113.6	80
New Jersey	48.0	10.8	22	37.2	78
New York	56.2	7.7	14	48.5	86
Pennsylvania	38.0	10.1	27	27.9	73
NORTH CENTRAL	192.5	92.3	48	100.2	52
East North Central	149.3	61.1	41	88.2	59
Illinois	39.8	15.0	38	24.8	62
Indiana	26.9	7.5	28	19.4	72
Michigan	26.0	14.8	57	11.2	43
Ohio	32.3	14.3	44	18.0	56
Wisconsin	24.3	9.5	39	14.8	61
West North Central	43.2	31.2	72	12.0	28
Iowa	6.2	5.1	82	1.1	18
Kansas	b	b	b	b	b
Minnesota	19.3	11.6	60	7.7	40
Missouri	12.2	10.6	87	1.6	13
Nebraska	3.8	3.2	84	0.6	16
North Dakota	b	b	b	b	b
South Dakota	1.7	0.7	41	1.0	59
SOUTH	185.9	135.4	73	50.5	27
South Atlantic	101.3	54.9	54	46.4	46
Delaware	1.9	0.2	10	1.7	89
Dist. of Columbia	6.6	0.6	9	6.0	91
Florida	12.0	10.3	86	1.7	14
Georgia	27.2	26.2	96	1.0	4
Maryland	15.1	5.0	33	10.1	67
North Carolina	16.6	4.3	26	12.3	74
South Carolina	b	b	b	b	b
Virginia	21.9	8.3	38	13.6	62
West Virginia	b	b	b	b	b
East South Central	15.8	13.4	85	2.4	15
Alabama	8.9	7.7	87	1.2	13
Kentucky	b	b	b	b	b
Mississippi	2.6	2.1	81	0.5	19
Tennessee	4.3	3.6	84	0.7	16
West South Central	68.8	67.1	97	1.7	3
Arkansas	b	b	b	b	b
Louisiana	b	b	b	b	b
Oklahoma	17.7	17.5	99	0.2	1
Texas	51.1	49.6	97	1.5	3
WEST	227.9	207.6	91	20.3	9
Mountain	64.5	60.6	94	3.9	6
Arizona	4.9	4.7	96	0.2	4
Colorado	30.0	30.0	b	b	b
Idaho	3.3	1.1	33	2.2	67
Montana	b	b	b	b	b
Nevada	7.5	7.2	96	0.3	4
New Mexico	7.1	6.8	96	0.3	4
Utah	8.8	8.2	93	0.6	7
Wyoming	2.9	2.6	90	0.3	10
Pacific	163.4	147.0	90	16.4	10
Alaska	b	b	b	b	b
California	145.5	142.5	98	3.0	2
Hawaii	b	b	b	b	b
Oregon	12.6	4.5	36	8.1	64
Washington	5.3	b	b	5.3	b

[b] Insufficient data.

have been reported, it may not have actually prevented the utility from adding new customers. For example, requirements for gas main extensions mean that the new customer should receive an appropriate surcharge to cover the financing of the extension.

Of the 31 companies reporting some form of restrictions or requirements, 13 were in the North Central region (most conservation-oriented requirements were also in this region), while the Northeast and South regions followed with 10 and 8, respectively. There were no reported restrictions in the West region.

Heating Appliance Data

There was an overall decline in manufacturers' shipments of total residential heating equipment of 4% (see Table 7) reflecting, in part, the decrease in housing starts from 1.3 million units in 1980 to 1.1 million units in 1981. Shipments of gas warm air furnaces declined slightly in 1981, down 2%, compared to a 22% decline in 1980 from the previous year. Gas boiler shipments, however, were off 45% in 1981, while gas wall and floor furnace shipments fell 36% and 14%, respectively.

Electric warm air furnace shipments increased slightly (3%) in 1981, while heat pump shipments increased 19% after dropping 23% the year before. Shipments of oil warm air furnaces increased 28% in 1981 after declining 60% in 1980, while oil boiler shipments increased 31% after a 39% decline the previous year.

Gas Consumption Per Unit

Respondents to the 1981 survey were asked to estimate the average annual gas consumption for both single and multifamily dwellings. Utilities representing 82% of all gas househeating customers responded to this portion in the 1980 survey. These responses were then used to develop the U.S. and regional average estimates of per unit gas use. Both categories were weighted by the number of residential gas customers for each responding utility in each state. In addition, the multifamily data represented a weighted average of dwellings with 2-4 units, and dwellings with 5 or more units (see Table 8).

Due to changes in the reporting methods of some utilities, particularly in the definition of baseload and multifamily gas use and consumption per unit, consumption data from year to year are not always comparable. With this caveat in mind, a comparison of 1980 and 1981 combined average consumption data (U.S. average weighted by customer and dwelling type) indicated that per unit gas consumption for househeating fell from 82.6 Mcf in 1980 to 76.6 Mcf in 1981, a drop of 7.3%. Baseload consumption declined by 5.1%, from 33.4 Mcf in 1980 to 31.7 Mcf in 1981. In single family dwellings gas consumption for househeating fell 7.9%, from an average of 92.1 Mcf per unit in 1980 to 84.8 Mcf in 1981. These data provide further evidence that energy conservation is continuing in the residential gas market.

Table 7

MANUFACTURERS' SHIPMENTS OF
RESIDENTIAL HEATING EQUIPMENT, 1978-1981

Category	1978	1979	1980	1981	Percentage Change from 1980
Central Heating Equipment					
Warm Air Furnaces					
Gas[a]	1,636,100	1,862,600	1,445,700	1,416,700	- 2
Oil[a]	263,000	157,800	63,700	81,200	+ 28
Electricity	349,300	283,200	227,400	234,500	+ 3
Boilers					
Gas[a]	125,900	221,300	293,300	161,600	- 45
Oil[a]	108,046	85,059	51,672	67,492	+ 31
Heat Pumps	560,075	547,694	422,829	504,786	+ 19
Other Gas Heating Equipment					
Wall Furnaces	199,190	207,000	199,390	127,160	- 36
Floor Furnaces	18,070	15,560	12,240	10,552	- 14

[a] Data not expanded.

Source: Gas Appliance Manufacturers Association.
Heat Pumps: Air Conditioning and Refrigeration Institute.

Table 8

1981 AVERAGE ANNUAL GAS CONSUMPTION/UNIT[a]
BY REGION
(Mcf)

Region	Single Family	Multifamily[b]	Combined Average[c]
Northeast			
Heating	107.2	80.0	95.8
Baseload	38.2	32.5	35.8
Total	145.4	112.5	131.6
North Central			
Heating	112.8	73.6	102.9
Baseload	35.5	26.8	33.3
Total	148.3	100.4	136.2
South			
Heating	62.7	44.9	59.1
Baseload	32.8	25.9	31.4
Total	95.5	70.8	90.5
West			
Heating	59.9	31.9	51.7
Baseload	27.6	27.0	31.6
Total	87.5	58.9	83.3
U.S. Average			
Heating	84.8	55.2	76.6
Baseload	33.5	27.2	31.7
Total	118.3	82.4	108.3

[a] Results for 1981 are based on responses from 175 different markets.

[b] Weighted average of dwellings containing 2-4 units and dwellings containing 5 units or more.

[c] Weighted by customer and dwelling type.

Climatic conditions have the most significant impact on gas used for househeating purposes, but the size and thermal integrity of the structure must also be considered. Reflecting these factors, single family per unit gas consumption for househeating was highest in the North Central region at 112.8 Mcf, and lowest in the West region at 59.9 Mcf. Gas consumption for househeating in multifamily dwellings followed a similar pattern with per unit consumption in the Northeast region at 80.0 Mcf, with a low of 31.9 Mcf in the West region.

Gas consumption for baseload use, which may include water heating, cooking, clothes drying and air conditioning, will vary with the size and type of appliances in the unit. However, variation in baseload use per unit between regions is not nearly as large as the variation in weather-sensitive househeating use between regions. For single family dwellings, baseload consumption was lowest in the West region at 27.6 Mcf, and highest in the Northeast region at 38.2 Mcf. Baseload consumption for multifamily dwellings ranged from 25.9 Mcf in the South to 32.5 Mcf in the Northeast.

APPENDIX 1

HOUSEHEATING DATA
1981 ACTUAL AND 1982 ANTICIPATED
BY COMPANY

This Appendix presents gas househeating data obtained from a survey of 160 companies on a regional, state and company-by-company basis. Column 1 of the Appendix shows reported residential and househeating customers (a gas customer is equal to a meter, while a househeating unit is the actual residence which uses gas for spaceheating). Column 2 provides average baseload and heating consumption per customer, and the number of heating degree days. (A heating degree day is a measure of the coldness of the weather, based on the extent to which the daily mean temperature falls below a reference temperature, usually 65°F). Column 3 shows the percentage of total dwelling units in the franchise ara that are served by gas for househeating. Column 4 summarizes reported househeating unit additions for 1981 and anticipated for 1982, broken down into additions from new construction, conversions, losses and net additions. In some cases, a change in methodology may result in inconsistent annual data for an individual utility. It should also be noted that reported market share figures, in particular, may be inconsistent in some cases due to different interpretations placed upon the corresponding survey question for an individual utility from year to year. This question was revised in 1981 so that data reported in subsequent years may remain consistent.

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
NEW ENGLAND									
CONNECTICUT									
SOUTHERN CONNECTICUT GAS CO.					1981	829	2,800	140	3,489
ALL RESIDENTIAL	122,215		27.0	22	1982	350	2,000	100	2,250
HOUSEHEATING ONLY	70,875	105.0							
HEATING DEGREE DAYS		5,741							
CONNECTICUT NATURAL GAS					1981	1,058	6,083	147	6,994
ALL RESIDENTIAL	113,698		39.5	39	1982	1,000	5,200	130	6,070
HOUSEHEATING ONLY	75,949	134.5							
HEATING DEGREE DAYS		6,053							
NORTHEAST UTILITIES					1981	850	3,497	65	4,282
ALL RESIDENTIAL	136,997		40.0	15	1982	1,150	2,800	50	3,900
HOUSEHEATING ONLY	88,947	112.0							
HEATING DEGREE DAYS		6,079							
NEW ENGLAND									
MASSACHUSETTS									
BOSTON GAS CO.					1981	279	1,515	NA	NA
ALL RESIDENTIAL	447,191		NA	34	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	218,138	NA							
HEATING DEGREE DAYS		5,669							
CAPE COD GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	34,437		30.0	29	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	28,890	80.0							
HEATING DEGREE DAYS		6,541							
FALL RIVER GAS CO.					1981	50	752	0	802
ALL RESIDENTIAL	36,289		18.0	78	1982	75	510	0	585
HOUSEHEATING ONLY	30,042	110.0							
HEATING DEGREE DAYS		6,326							
LOWELL GAS CO.					1981	492	419	19	892
ALL RESIDENTIAL	45,469		40.2	53	1982	300	355	10	645
HOUSEHEATING ONLY	39,774	104.6							
HEATING DEGREE DAYS		6,015							
BERKSHIRE GAS CO.					1981	70	1,023	15	1,078
ALL RESIDENTIAL	22,882		30.0	NA	1982	100	500	NA	NA
HOUSEHEATING ONLY	14,076	150.0							
HEATING DEGREE DAYS		7,065							

DIVISION / STATE / COMPANY	CUSTOMERS	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR)		GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS			
	YEAR-END	HEATING	BASE-LOAD		YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
NEW ENGLAND									
MASSACHUSETTS									
BAY STATE GAS CO.									
ALL RESIDENTIAL	180,708		37.0	34	1981	903	4,100	0	5,003
HOUSEHEATING ONLY	120,850	120.0			1982	400	2,230	0	2,630
HEATING DEGREE DAYS		6,150							
HAVERHILL GAS CO.									
ALL RESIDENTIAL	26,789		20.0	45	1981	200	800	300	700
HOUSEHEATING ONLY	18,775	120.0			1982	150	800	NA	NA
HEATING DEGREE DAYS		6,836							
NEW ENGLAND									
MAINE									
NORTHERN UTILITIES INC.									
ALL RESIDENTIAL	12,878		22.0	2	1981	200	2,321	NA	NA
HOUSEHEATING ONLY	9,230	90.0			1982	200	1,500	NA	NA
HEATING DEGREE DAYS		7,695							
NEW ENGLAND									
NEW HAMPSHIRE									
CONCORD NATURAL GAS CORP.									
ALL RESIDENTIAL	5,289		39.0	40	1981	131	155	0	286
HOUSEHEATING ONLY	3,592	110.0			1982	125	112	8	229
HEATING DEGREE DAYS		7,254							
GAS SERVICE, INC.									
ALL RESIDENTIAL	17,582		36.0	40	1981	369	283	0	652
HOUSEHEATING ONLY	15,824	114.0			1982	370	150	0	520
HEATING DEGREE DAYS		7,254							
MANCHESTER GAS CO.									
ALL RESIDENTIAL	14,265		37.0	33	1981	0	448	0	448
HOUSEHEATING ONLY	9,234	135.0			1982	0	129	0	129
HEATING DEGREE DAYS		6,762							
NORTHERN UTILITIES INC.									
ALL RESIDENTIAL	7,371		30.0	16	1981	100	422	0	522
HOUSEHEATING ONLY	6,537	80.0			1982	100	400	0	500
HEATING DEGREE DAYS		7,695							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
NEW ENGLAND									
RHODE ISLAND									
VALLEY GAS CO.					1981	25	2,181	100	2,106
ALL RESIDENTIAL	43,531		50.0	69	1982	30	520	50	500
HOUSEHEATING ONLY	30,209	100.0							
HEATING DEGREE DAYS		6,719							
NEW ENGLAND									
VERMONT									
VERMONT GAS SYSTEMS					1981	60	275	100	235
ALL RESIDENTIAL	11,056		36.2	NA	1982	50	250	100	200
HOUSEHEATING ONLY	9,006	106.3							
HEATING DEGREE DAYS		7,604							
MIDDLE ATLANTIC									
NEW JERSEY									
SOUTH JERSEY GAS CO.					1981	1,884	2,788	0	4,672
ALL RESIDENTIAL	119,875		36.0	41	1982	1,880	2,820	0	4,700
HOUSEHEATING ONLY	90,536	90.3							
HEATING DEGREE DAYS		5,145							
NEW JERSEY NATURAL GAS CO.					1981	5,059	4,959	0	10,018
ALL RESIDENTIAL	214,682		43.4	38	1982	3,850	4,400	0	8,250
HOUSEHEATING ONLY	164,317	86.0							
HEATING DEGREE DAYS		5,660							
PUBLIC SERVICE ELEC. & GAS					1981	5,829	39,698	154	45,373
ALL RESIDENTIAL	1,180,069		35.0	53	1982	5,000	30,000	150	34,850
HOUSEHEATING ONLY	658,247	106.0							
HEATING DEGREE DAYS		5,082							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEAT-ING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CON-VER-SIONS	LESS LOSSES	NET ADDI-TIONS
MIDDLE ATLANTIC									
NEW YORK									
BROOKLYN UNION GAS CO.					1981	2,200	46,600	1,800	47,000
ALL RESIDENTIAL	1,034,696		45.0	42	1982	1,000	28,474	1,500	27,974
HOUSEHEATING ONLY	308,196	107.0							
HEATING DEGREE DAYS		4,907							
CENTRAL HUDSON GAS & ELEC.					1981	200	4,000	0	4,200
ALL RESIDENTIAL	42,165		55.0	17	1982	250	1,600	0	1,850
HOUSEHEATING ONLY	26,205	70.0							
HEATING DEGREE DAYS		6,389							
NIAGARA MOHAWK POWER CORP.					1981	137	6,870	30	6,977
ALL RESIDENTIAL	395,983		38.0	41	1982	60	3,020	30	3,050
HOUSEHEATING ONLY	319,296	110.0							
HEATING DEGREE DAYS		6,722							
CONSOLIDATED EDISON CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	935,410		52.0	41	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	156,272	121.0							
HEATING DEGREE DAYS		4,772							
NATIONAL FUEL DISTRIBUTION					1981	1,400	1,593	1,776	1,217
ALL RESIDENTIAL	454,535		45.0	90	1982	1,540	1,745	1,500	1,785
HOUSEHEATING ONLY	433,113	112.0							
HEATING DEGREE DAYS		6,703							
LONG ISLAND LIGHTING CO.					1981	616	7,829	0	8,445
ALL RESIDENTIAL	363,930		18.0	21	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	168,867	138.3							
HEATING DEGREE DAYS		4,850							
NEW YORK STATE ELEC. & GAS					1981	NA	NA	NA	NA
ALL RESIDENTIAL	112,782		28.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	103,273	129.0							
HEATING DEGREE DAYS		7,110							
ROCHESTER GAS & ELECTRIC					1981	1,737	3,308	400	4,645
ALL RESIDENTIAL	211,433		34.4	NA	1982	1,468	NA	NA	NA
HOUSEHEATING ONLY	178,932	110.0							
HEATING DEGREE DAYS		6,907							
ORANGE & ROCKLAND UTILITIES					1981	1,393	240	0	1,633
ALL RESIDENTIAL	80,694		46.0	59	1982	1,266	250	0	1,516
HOUSEHEATING ONLY	74,614	121.0							
HEATING DEGREE DAYS		5,992							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MIDDLE ATLANTIC									
NEW YORK									
COLUMBIA GAS OF NEW YORK					1981	235	172	231	176
ALL RESIDENTIAL	58,368		39.1	57	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	52,369	115.9							
HEATING DEGREE DAYS		7,197							
MIDDLE ATLANTIC									
PENNSYLVANIA									
EQUITABLE GAS CO.					1981	947	178	1,031	94
ALL RESIDENTIAL	227,148		40.0	NA	1982	900	180	900	180
HOUSEHEATING ONLY	221,000	120.0							
HEATING DEGREE DAYS		6,389							
NATIONAL FUEL DISTRIBUTION					1981	700	1,043	1,631	112
ALL RESIDENTIAL	183,965		41.0	86	1982	770	1,105	1,200	675
HOUSEHEATING ONLY	180,589	118.0							
HEATING DEGREE DAYS		6,706							
NORTH PENN GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	27,483		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	27,284	129.0							
HEATING DEGREE DAYS		7,187							
PEOPLES NATURAL GAS CO.					1981	1,575	646	781	1,440
ALL RESIDENTIAL	297,273		58.0	NA	1982	1,400	600	781	1,219
HOUSEHEATING ONLY	287,283	110.0							
HEATING DEGREE DAYS		6,325							
PHILADELPHIA ELECTRIC CO.					1981	1,637	9,255	100	10,792
ALL RESIDENTIAL	271,464		30.0	38	1982	2,140	10,800	100	12,840
HOUSEHEATING ONLY	193,038	120.0							
HEATING DEGREE DAYS		5,185							
PHILADELPHIA GAS WORKS					1981	1,933	4,015	1,797	4,151
ALL RESIDENTIAL	514,837		48.0	70	1982	1,500	700	1,500	700
HOUSEHEATING ONLY	383,089	113.0							
HEATING DEGREE DAYS		4,847							
PIKE COUNTY LIGHT & POWER					1981	5	1	8	-2
ALL RESIDENTIAL	844		40.0	31	1982	2	0	0	2
HOUSEHEATING ONLY	792	118.0							
HEATING DEGREE DAYS		5,992							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MIDDLE ATLANTIC									
PENNSYLVANIA									
UGI CORP.					1981	791	11,084	0	11,875
ALL RESIDENTIAL	188,789		33.1	24	1982	820	7,385	0	8,205
HOUSEHEATING ONLY	109,339	92.2							
HEATING DEGREE DAYS		5,771							
COLUMBIA GAS OF PENNSYLVANIA					1981	2,109	1,176	739	2,546
ALL RESIDENTIAL	304,395		37.0	41	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	281,293	116.8							
HEATING DEGREE DAYS		6,315							
EAST NORTH CENTRAL									
ILLINOIS									
CENTRAL ILLINOIS LIGHT CO.					1981	348	500	144	704
ALL RESIDENTIAL	169,465		31.0	77	1982	150	300	100	350
HOUSEHEATING ONLY	164,906	101.0							
HEATING DEGREE DAYS		5,948							
CENTRAL IL PUBLIC SERVICE					1981	500	1,887	150	2,237
ALL RESIDENTIAL	134,065		22.0	80	1982	700	2,800	150	3,350
HOUSEHEATING ONLY	129,792	93.0							
HEATING DEGREE DAYS		5,219							
ILLINOIS POWER CO.					1981	1,200	2,600	0	3,800
ALL RESIDENTIAL	349,974		21.8	80	1982	2,370	1,141	0	3,511
HOUSEHEATING ONLY	336,504	115.8							
HEATING DEGREE DAYS		5,134							
IOWA-ILLINOIS GAS & ELECTRIC					1981	500	63	0	563
ALL RESIDENTIAL	59,211		18.0	95	1982	1,000	50	0	1,050
HOUSEHEATING ONLY	56,148	106.8							
HEATING DEGREE DAYS		5,644							
NORTH SHORE GAS CO.					1981	1,020	1,350	200	2,170
ALL RESIDENTIAL	91,018		51.0	88	1982	450	650	200	900
HOUSEHEATING ONLY	84,424	144.0							
HEATING DEGREE DAYS		6,447							
PEOPLES GAS LIGHT & COKE					1981	2,400	13,600	2,100	13,900
ALL RESIDENTIAL	833,634		46.0	94	1982	2,000	10,000	3,000	9,000
HOUSEHEATING ONLY	566,358	144.0							
HEATING DEGREE DAYS		6,447							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
ILLINOIS									
NORTHERN ILLINOIS GAS CO.									
ALL RESIDENTIAL	1,316,901		37.0	85	1981	10,941	10,754	4,500	17,195
HOUSEHEATING ONLY	1,244,031	128.0			1982	8,000	9,900	4,500	13,400
HEATING DEGREE DAYS		6,003							
UNITED CITIES GAS CO.									
ALL RESIDENTIAL	13,164		30.0	NA	1981	458	NA	NA	NA
HOUSEHEATING ONLY	12,518	74.0			1982	375	NA	NA	NA
HEATING DEGREE DAYS		4,548							
EAST NORTH CENTRAL									
INDIANA									
LAWRENCEBURG GAS CO.									
ALL RESIDENTIAL	3,590		36.0	75	1981	0	90	0	90
HOUSEHEATING ONLY	3,529	105.0			1982	10	65	0	75
HEATING DEGREE DAYS		5,486							
CITIZENS GAS & COKE UTILITY									
ALL RESIDENTIAL	191,904		55.0	75	1981	NA	NA	NA	NA
HOUSEHEATING ONLY	175,851	111.0			1982	NA	NA	NA	NA
HEATING DEGREE DAYS		5,589							
HOOSIER GAS CORP.									
ALL RESIDENTIAL	20,711		28.0	NA	1981	190	153	198	145
HOUSEHEATING ONLY	20,459	120.0			1982	NA	NA	NA	NA
HEATING DEGREE DAYS		4,716							
INDIANA GAS CO.									
ALL RESIDENTIAL	279,308		36.0	84	1981	400	9,055	3,000	6,455
HOUSEHEATING ONLY	272,359	106.0			1982	500	8,000	2,500	6,000
HEATING DEGREE DAYS		5,548							
KOKOMO GAS & FUEL CO.									
ALL RESIDENTIAL	26,132		28.0	85	1981	151	90	3	238
HOUSEHEATING ONLY	25,686	140.0			1982	0	NA	NA	NA
HEATING DEGREE DAYS		5,688							
NORTHERN IN PUBLIC SERVICE									
ALL RESIDENTIAL	486,650		37.0	NA	1981	3,600	6,650	785	9,465
HOUSEHEATING ONLY	448,460	104.0			1982	5,000	5,400	1,000	9,400
HEATING DEGREE DAYS		6,494							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
INDIANA									
OHIO VALLEY GAS CORP.					1981	39	240	137	142
ALL RESIDENTIAL	21,762		15.0	97	1982	50	295	5	340
HOUSEHEATING ONLY	21,299	127.0							
HEATING DEGREE DAYS		5,383							
RICHMOND GAS CORP.					1981	100	213	6	307
ALL RESIDENTIAL	12,104		NA	NA	1982	100	200	NA	NA
HOUSEHEATING ONLY	10,985	NA							
HEATING DEGREE DAYS		6,057							
SOUTHERN IN GAS & ELECTRIC					1981	0	963	282	681
ALL RESIDENTIAL	57,795		28.0	62	1982	200	1,100	200	1,100
HOUSEHEATING ONLY	56,774	125.0							
HEATING DEGREE DAYS		4,548							
EAST NORTH CENTRAL									
MICHIGAN									
BATTLE CREEK GAS CO.					1981	10	1,855	11	1,854
ALL RESIDENTIAL	28,702		43.8	92	1982	10	1,205	NA	NA
HOUSEHEATING ONLY	26,872	144.9							
HEATING DEGREE DAYS		5,969							
CONSUMERS POWER CO.					1981	9,485	9,850	0	19,335
ALL RESIDENTIAL	1,082,495		24.8	76	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	1,051,171	135.4							
HEATING DEGREE DAYS		6,734							
SOUTHEASTERN MICHIGAN GAS					1981	800	461	0	1,261
ALL RESIDENTIAL	60,421		25.0	66	1982	900	300	0	1,200
HOUSEHEATING ONLY	59,467	115.0							
HEATING DEGREE DAYS		7,929							
LAKE SUPERIOR DISTRICT POWER					1981	13	236	0	249
ALL RESIDENTIAL	3,444		43.0	97	1982	10	200	NA	NA
HOUSEHEATING ONLY	3,337	130.0							
HEATING DEGREE DAYS		8,750							
MICHIGAN CONSOLIDATED GAS					1981	5,610	4,180	6,330	3,460
ALL RESIDENTIAL	981,104		45.0	85	1982	5,620	3,900	3,500	6,020
HOUSEHEATING ONLY	934,217	130.0							
HEATING DEGREE DAYS		6,450							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
MICHIGAN									
MICHIGAN GAS UTILITIES CO.					1981	984	761	37	1,708
ALL RESIDENTIAL	96,557		32.0	90	1982	900	1,000	NA	NA
HOUSEHEATING ONLY	93,756	100.0							
HEATING DEGREE DAYS		6,652							
WISCONSIN PUBLIC SERVICE					1981	NA	NA	NA	NA
ALL RESIDENTIAL	4,642		32.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	4,267	123.0							
HEATING DEGREE DAYS		7,845							
EAST NORTH CENTRAL									
OHIO									
CINCINNATI GAS & ELECTRIC					1981	100	2,100	200	2,000
ALL RESIDENTIAL	270,061		36.0	88	1982	300	1,860	200	1,960
HOUSEHEATING ONLY	249,504	105.0							
HEATING DEGREE DAYS		5,486							
DAYTON POWER & LIGHT CO.					1981	1,139	1,179	1,285	1,033
ALL RESIDENTIAL	244,112		NA	67	1982	970	1,012	NA	NA
HOUSEHEATING ONLY	240,398	NA							
HEATING DEGREE DAYS		5,781							
EAST OHIO GAS CO.					1981	5,075	5,498	3,500	7,073
ALL RESIDENTIAL	929,561		48.0	85	1982	5,688	6,162	3,500	8,350
HOUSEHEATING ONLY	917,373	117.0							
HEATING DEGREE DAYS		6,340							
NATIONAL OIL & GAS CORP.					1981	119	0	0	119
ALL RESIDENTIAL	14,419		50.0	96	1982	150	30	0	180
HOUSEHEATING ONLY	14,419	90.0							
HEATING DEGREE DAYS		6,506							
NATIONAL FUEL DISTRIBUTION					1981	20	29	41	8
ALL RESIDENTIAL	5,377		39.0	86	1982	25	35	40	20
HOUSEHEATING ONLY	5,279	121.0							
HEATING DEGREE DAYS		6,706							
OHIO GAS CO.					1981	185	316	0	501
ALL RESIDENTIAL	22,329		42.0	85	1982	200	340	40	500
HOUSEHEATING ONLY	21,872	139.2							
HEATING DEGREE DAYS		6,436							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
OHIO									
RIVER GAS CO.									
ALL RESIDENTIAL	17,094		20.0	96	1981	117	29	166	-20
HOUSEHEATING ONLY	16,976	100.0			1982	125	27	88	64
HEATING DEGREE DAYS		5,207							
TOLEDO EDISON CO.									
ALL RESIDENTIAL	4,674		41.0	65	1981	2	240	0	242
HOUSEHEATING ONLY	4,513	100.0			1982	5	153	0	158
HEATING DEGREE DAYS		7,174							
WEST OHIO GAS CO.									
ALL RESIDENTIAL	49,796		28.8	54	1981	487	219	169	537
HOUSEHEATING ONLY	48,338	93.2			1982	360	210	200	370
HEATING DEGREE DAYS		6,273							
COLUMBIA GAS OF OHIO									
ALL RESIDENTIAL	980,367		34.2	61	1981	8,023	2,763	3,810	6,976
HOUSEHEATING ONLY	967,930	106.5			1982	NA	NA	NA	NA
HEATING DEGREE DAYS		6,156							
EAST NORTH CENTRAL									
WISCONSIN									
LAKE SUPERIOR DISTRICT POWER									
ALL RESIDENTIAL	5,613		43.0	97	1981	54	154	0	208
HOUSEHEATING ONLY	5,462	130.0			1982	50	120	0	170
HEATING DEGREE DAYS		8,750							
MADISON GAS & ELECTRIC									
ALL RESIDENTIAL	58,450		31.0	69	1981	250	2,550	20	2,780
HOUSEHEATING ONLY	51,930	103.0			1982	500	2,700	NA	NA
HEATING DEGREE DAYS		7,134							
WISCONSIN GAS CO.									
ALL RESIDENTIAL	378,585		31.0	78	1981	1,335	4,394	25	5,704
HOUSEHEATING ONLY	322,710	99.0			1982	4,061	4,417	25	8,453
HEATING DEGREE DAYS		7,387							
NORTHERN STATES POWER CO.									
ALL RESIDENTIAL	27,810		17.0	20	1981	124	820	3	941
HOUSEHEATING ONLY	23,254	84.0			1982	NA	NA	NA	NA
HEATING DEGREE DAYS		6,890							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST NORTH CENTRAL									
WISCONSIN									
SUPERIOR WATER LIGHT & POWER					1981	37	145	74	108
ALL RESIDENTIAL	8,163		27.9	50	1982	20	75	50	45
HOUSEHEATING ONLY	5,515	147.7							
HEATING DEGREE DAYS		9,247							
WISCONSIN FUEL & LIGHT CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	34,064		30.3	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	31,953	93.4							
HEATING DEGREE DAYS		7,564							
WISCONSIN POWER & LIGHT CO.					1981	494	1,731	0	2,225
ALL RESIDENTIAL	88,342		33.0	67	1982	803	1,175	0	1,978
HOUSEHEATING ONLY	80,568	90.0							
HEATING DEGREE DAYS		7,134							
WISCONSIN PUBLIC SERVICE					1981	NA	NA	NA	NA
ALL RESIDENTIAL	136,295		32.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	124,513	123.0							
HEATING DEGREE DAYS		7,845							
WISCONSIN SOUTHERN GAS CO.					1981	217	479	0	696
ALL RESIDENTIAL	33,757		33.6	84	1982	250	410	0	660
HOUSEHEATING ONLY	32,418	85.7							
HEATING DEGREE DAYS		6,890							
WEST NORTH CENTRAL									
IOWA									
IOWA ELECTRIC LIGHT & POWER					1981	1,016	704	0	1,720
ALL RESIDENTIAL	113,241		32.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	110,207	86.0							
HEATING DEGREE DAYS		6,128							
IOWA-ILLINOIS GAS & ELECTRIC					1981	1,855	100	0	1,955
ALL RESIDENTIAL	146,100		20.8	95	1982	1,200	100	0	1,300
HOUSEHEATING ONLY	139,257	95.7							
HEATING DEGREE DAYS		5,644							
IOWA POWER & LIGHT CO.					1981	390	330	200	520
ALL RESIDENTIAL	119,172		33.6	82	1982	830	300	200	930
HOUSEHEATING ONLY	115,834	117.5							
HEATING DEGREE DAYS		5,566							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST NORTH CENTRAL									
IOWA									
IOWA PUBLIC SERVICE CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	98,155		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	92,331	NA							
HEATING DEGREE DAYS		6,554							
NORTH CENTRAL PUBLIC SERVICE					1981	26	72	20	78
ALL RESIDENTIAL	11,406		50.0	80	1982	32	62	13	81
HOUSEHEATING ONLY	11,284	130.0							
HEATING DEGREE DAYS		5,704							
WEST NORTH CENTRAL									
KANSAS									
ARKANSAS LOUISIANA GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	17,639		32.4	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	17,639	58.0							
HEATING DEGREE DAYS		4,122							
KANSAS POWER & LIGHT CO.					1981	1,404	100	100	1,404
ALL RESIDENTIAL	116,763		32.4	95	1982	1,000	190	190	1,000
HOUSEHEATING ONLY	114,428	70.6							
HEATING DEGREE DAYS		4,816							
WEST NORTH CENTRAL									
MINNESOTA									
AUSTIN UTILITIES					1981	49	7	15	41
ALL RESIDENTIAL	8,512		36.0	NA	1982	NA	7	12	NA
HOUSEHEATING ONLY	8,409	117.0							
HEATING DEGREE DAYS		7,576							
CITY OF DULUTH WATER & GAS					1981	30	762	12	780
ALL RESIDENTIAL	19,627		55.0	60	1982	20	NA	6	NA
HOUSEHEATING ONLY	11,585	140.0							
HEATING DEGREE DAYS		9,510							
MONTANA-DAKOTA UTILITIES CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	1,583		26.1	64	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	1,019	87.0							
HEATING DEGREE DAYS		8,000							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	YEAR	GAS-HTD HOUSING UNIT ADDITIONS NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST NORTH CENTRAL									
MINNESOTA									
NORTHERN STATES POWER CO.					1981	2,212	5,499	250	7,461
ALL RESIDENTIAL	206,448		36.0	86	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	187,843	96.0							
HEATING DEGREE DAYS		7,423							
NORTH CENTRAL PUBLIC SERVICE					1981	1,373	739	0	2,112
ALL RESIDENTIAL	39,555		42.0	85	1982	1,300	700	NA	NA
HOUSEHEATING ONLY	39,268	97.0							
HEATING DEGREE DAYS		8,096							
MINNESOTA GAS CO.					1981	5,266	6,626	50	11,842
ALL RESIDENTIAL	377,182		38.8	90	1982	5,500	3,800	50	9,250
HOUSEHEATING ONLY	367,406	92.4							
HEATING DEGREE DAYS		6,993							
WEST NORTH CENTRAL									
MISSOURI									
ST. JOSEPH LIGHT & POWER					1981	37	5	11	31
ALL RESIDENTIAL	4,069		24.0	72	1982	35	9	10	34
HOUSEHEATING ONLY	4,000	75.0							
HEATING DEGREE DAYS		5,731							
MISSOURI PUBLIC SERVICE CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	35,837		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	35,610	NA							
HEATING DEGREE DAYS		4,942							
MISSOURI UTILITIES CO.					1981	125	167	22	270
ALL RESIDENTIAL	43,656		25.5	80	1982	100	155	20	235
HOUSEHEATING ONLY	43,126	96.5							
HEATING DEGREE DAYS		4,216							
CITY OF SPRINGFIELD					1981	NA	NA	NA	NA
ALL RESIDENTIAL	48,426		30.0	90	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	48,426	77.0							
HEATING DEGREE DAYS		4,137							
LACLEDE GAS CO.					1981	5,000	700	1,518	4,182
ALL RESIDENTIAL	519,628		41.2	78	1982	5,025	600	1,225	4,400
HOUSEHEATING ONLY	498,6[illegible]	75.7							
HEATING DEGREE DAYS		4,551							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST NORTH CENTRAL									
NEBRASKA									
HASTINGS UTILITIES					1981	18	NA	8	NA
ALL RESIDENTIAL	7,896		NA	89	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	7,492	107.0							
HEATING DEGREE DAYS		4,713							
IOWA PUBLIC SERVICE CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	3,376		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	3,376	NA							
HEATING DEGREE DAYS		6,554							
METROPOLITAN UTILITIES					1981	1,500	200	200	1,500
ALL RESIDENTIAL	118,940		37.0	84	1982	1,200	200	200	1,200
HOUSEHEATING ONLY	114,965	84.0							
HEATING DEGREE DAYS		5,658							
NORTHWESTERN PUBLIC SERVICE					1981	915	37	21	931
ALL RESIDENTIAL	32,399		11.1	99	1982	275	19	21	273
HOUSEHEATING ONLY	32,264	104.6							
HEATING DEGREE DAYS		5,308							
MINNESOTA GAS CO.					1981	573	162	5	730
ALL RESIDENTIAL	102,461		35.8	95	1982	600	180	5	775
HOUSEHEATING ONLY	100,655	71.9							
HEATING DEGREE DAYS		5,165							
WEST NORTH CENTRAL									
NORTH DAKOTA									
MONTANA-DAKOTA UTILITIES CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	60,868		35.9	99	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	60,259	83.9							
HEATING DEGREE DAYS		7,538							
NORTHERN STATES POWER CO.					1981	41	211	424	-172
ALL RESIDENTIAL	18,144		24.0	63	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	13,733	97.0							
HEATING DEGREE DAYS		8,362							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST NORTH CENTRAL									
SOUTH DAKOTA									
IOWA PUBLIC SERVICE CO.									
ALL RESIDENTIAL	7,320		NA	NA	1981	NA	NA	NA	NA
HOUSEHEATING ONLY	7,267	NA			1982	NA	NA	NA	NA
HEATING DEGREE DAYS		6,554							
MONTANA-DAKOTA UTILITIES CO.									
ALL RESIDENTIAL	24,715		36.0	99	1981	NA	NA	NA	NA
HOUSEHEATING ONLY	24,468	59.7			1982	NA	NA	NA	NA
HEATING DEGREE DAYS		5,912							
NORTHWESTERN PUBLIC SERVICE									
ALL RESIDENTIAL	24,789		26.6	76	1981	89	763	27	825
HOUSEHEATING ONLY	23,524	123.4			1982	132	371	20	483
HEATING DEGREE DAYS		6,536							
MINNESOTA GAS CO.									
ALL RESIDENTIAL	33,017		35.0	98	1981	279	314	5	588
HOUSEHEATING ONLY	32,620	79.0			1982	300	250	5	545
HEATING DEGREE DAYS		6,717							
SOUTH ATLANTIC									
DISTRICT OF COLUMBIA									
WASHINGTON GAS LIGHT CO.									
ALL RESIDENTIAL	133,319		39.0	69	1981	500	19,900	400	20,000
HOUSEHEATING ONLY	94,675	93.0			1982	600	6,000	400	6,200
HEATING DEGREE DAYS		3,723							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
SOUTH ATLANTIC									
DELAWARE									
CHESAPEAKE UTILITIES CORP.					1981	189	189	0	378
ALL RESIDENTIAL	8,509		15.0	88	1982	208	208	0	416
HOUSEHEATING ONLY	5,185	41.4							
HEATING DEGREE DAYS		4,240							
DELMARVA POWER & LIGHT CO.					1981	0	1,658	0	1,658
ALL RESIDENTIAL	69,865		31.4	NA	1982	0	1,500	NA	NA
HOUSEHEATING ONLY	45,763	121.2							
HEATING DEGREE DAYS		5,134							
SOUTH ATLANTIC									
FLORIDA									
FLORIDA PUBLIC UTILITIES CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	29,800		36.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	29,800	NA							
HEATING DEGREE DAYS		320							
PEOPLES GAS SYSTEM, INC.					1981	3,603	494	472	3,625
ALL RESIDENTIAL	159,738		16.0	42	1982	3,550	580	NA	NA
HOUSEHEATING ONLY	92,308	140.0							
HEATING DEGREE DAYS		271							
SOUTH ATLANTIC									
GEORGIA									
ATLANTA GAS LIGHT CO.					1981	25,151	985	0	26,136
ALL RESIDENTIAL	786,076		53.4	93	1982	25,631	1,015	0	26,646
HOUSEHEATING ONLY	762,494	46.0							
HEATING DEGREE DAYS		3,082							
GAS LIGHT OF COLUMBUS					1981	345	28	347	26
ALL RESIDENTIAL	47,429		25.0	88	1982	400	29	345	84
HOUSEHEATING ONLY	47,429	52.0							
HEATING DEGREE DAYS		2,414							
UNITED CITIES GAS CO.					1981	140	NA	220	NA
ALL RESIDENTIAL	6,651		20.0	NA	1982	150	NA	NA	NA
HOUSEHEATING ONLY	6,556	55.0							
HEATING DEGREE DAYS		3,082							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	YEAR	GAS-HTD HOUSING UNIT ADDITIONS NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
SOUTH ATLANTIC									
MARYLAND									
CHESAPEAKE UTILITIES CORP.					1981	164	164	0	328
ALL RESIDENTIAL	4,269		15.0	88	1982	180	180	0	360
HOUSEHEATING ONLY	2,275	41.4							
HEATING DEGREE DAYS		4,240							
BALTIMORE GAS & ELECTRIC					1981	736	3,224	0	3,960
ALL RESIDENTIAL	477,654		44.0	44	1982	1,300	2,750	300	3,750
HOUSEHEATING ONLY	331,938	87.0							
HEATING DEGREE DAYS		4,890							
WASHINGTON GAS LIGHT CO.					1981	2,000	28,400	400	30,000
ALL RESIDENTIAL	211,985		38.5	69	1982	3,500	7,200	400	10,300
HOUSEHEATING ONLY	202,161	87.5							
HEATING DEGREE DAYS		3,723							
COLUMBIA GAS OF MARYLAND					1981	206	114	162	158
ALL RESIDENTIAL	29,153		29.8	38	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	26,641	109.3							
HEATING DEGREE DAYS		6,315							
SOUTH ATLANTIC									
NORTH CAROLINA									
PIEDMONT NATURAL GAS CO.					1981	1,500	4,100	700	4,900
ALL RESIDENTIAL	139,783		28.2	31	1982	1,500	3,600	800	4,300
HOUSEHEATING ONLY	139,298	74.0							
HEATING DEGREE DAYS		3,995							
PUBLIC SERVICE OF NC					1981	1,316	4,690	240	5,766
ALL RESIDENTIAL	131,620		24.7	50	1982	1,375	5,140	250	6,265
HOUSEHEATING ONLY	117,841	97.1							
HEATING DEGREE DAYS		3,872							
UNITED CITIES GAS CO.					1981	170	NA	NA	NA
ALL RESIDENTIAL	2,479		23.0	NA	1982	175	NA	NA	NA
HOUSEHEATING ONLY	2,282	70.0							
HEATING DEGREE DAYS		4,373							
NORTH CAROLINA NATURAL GAS					1981	NA	NA	NA	NA
ALL RESIDENTIAL	72,980		16.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	68,799	71.0							
HEATING DEGREE DAYS		3,133							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
SOUTH ATLANTIC									
SOUTH CAROLINA									
PIEDMONT NATURAL GAS CO.					1981	600	1,550	300	1,850
ALL RESIDENTIAL	44,434		27.5	36	1982	600	1,250	300	1,550
HOUSEHEATING ONLY	44,179	73.6							
HEATING DEGREE DAYS		3,595							
COMMISSION OF PUBLIC WORKS					1981	90	87	0	177
ALL RESIDENTIAL	8,665		14.0	51	1982	50	90	NA	NA
HOUSEHEATING ONLY	6,065	64.0							
HEATING DEGREE DAYS		3,858							
PEOPLES NATURAL GAS OF SC					1981	NA	540	NA	NA
ALL RESIDENTIAL	5,729		14.0	28	1982	NA	564	NA	NA
HOUSEHEATING ONLY	5,315	59.8							
HEATING DEGREE DAYS		2,901							
UNITED CITIES GAS CO.					1981	60	NA	95	NA
ALL RESIDENTIAL	3,448		22.0	NA	1982	75	NA	NA	NA
HOUSEHEATING ONLY	3,098	57.0							
HEATING DEGREE DAYS		3,531							
SOUTH ATLANTIC									
VIRGINIA									
CITY OF CHARLOTTESVILLE					1981	NA	NA	NA	NA
ALL RESIDENTIAL	10,645		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	10,645	NA							
HEATING DEGREE DAYS		4,517							
CITY OF DANVILLE					1981	49	125	13	161
ALL RESIDENTIAL	13,828		23.3	69	1982	100	160	15	245
HOUSEHEATING ONLY	12,030	89.8							
HEATING DEGREE DAYS		4,275							
CITY OF RICHMOND					1981	644	1,176	142	1,678
ALL RESIDENTIAL	64,917		25.7	NA	1982	600	1,000	150	1,450
HOUSEHEATING ONLY	47,099	72.8							
HEATING DEGREE DAYS		4,189							
ROANOKE GAS CO.					1981	498	551	60	989
ALL RESIDENTIAL	29,656		32.0	38	1982	400	415	70	745
HOUSEHEATING ONLY	27,327	118.0							
HEATING DEGREE DAYS		4,800							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
SOUTH ATLANTIC									
VIRGINIA									
UNITED CITIES GAS CO.					1981	90	NA	29	NA
ALL RESIDENTIAL	958		16.0	NA	1982	100	NA	NA	NA
HOUSEHEATING ONLY	865	129.0							
HEATING DEGREE DAYS		4,776							
COLUMBIA GAS OF VIRGINIA					1981	328	199	126	401
ALL RESIDENTIAL	35,112		31.2	38	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	34,093	83.1							
HEATING DEGREE DAYS		4,860							
WASHINGTON GAS LIGHT CO.					1981	3,000	19,600	300	22,300
ALL RESIDENTIAL	164,027		35.5	55	1982	3,500	6,100	300	9,300
HOUSEHEATING ONLY	151,500	85.0							
HEATING DEGREE DAYS		3,723							
SOUTH ATLANTIC									
WEST VIRGINIA									
EQUITABLE GAS CO.					1981	67	NA	NA	NA
ALL RESIDENTIAL	10,285		32.0	NA	1982	65	NA	NA	NA
HOUSEHEATING ONLY	9,900	99.0							
HEATING DEGREE DAYS		NA							
HOPE NATURAL GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	102,703		38.5	NA	1982	286	NA	NA	NA
HOUSEHEATING ONLY	100,947	87.6							
HEATING DEGREE DAYS		5,256							
COLUMBIA GAS OF WV					1981	1,270	276	2,464	-918
ALL RESIDENTIAL	191,063		30.1	53	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	189,096	99.7							
HEATING DEGREE DAYS		5,448							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST SOUTH CENTRAL									
ALABAMA									
ALABAMA GAS CORP.					1981	4,756	433	800	4,389
ALL RESIDENTIAL	328,258		31.0	85	1982	4,000	600	800	3,800
HOUSEHEATING ONLY	321,692	60.0							
HEATING DEGREE DAYS		2,936							
MOBILE GAS SERVICE CORP.					1981	1,134	477	2,369	-758
ALL RESIDENTIAL	82,182		27.5	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	81,360	46.8							
HEATING DEGREE DAYS		1,720							
DECATUR UTILITIES GAS					1981	1	10	55	-44
ALL RESIDENTIAL	3,915		10.0	25	1982	20	9	12	17
HOUSEHEATING ONLY	3,915	43.0							
HEATING DEGREE DAYS		3,590							
CITY OF FLORENCE					1981	NA	NA	NA	NA
ALL RESIDENTIAL	7,147		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	7,147	NA							
HEATING DEGREE DAYS		NA							
SOUTHEAST ALABAMA GAS					1981	NA	NA	NA	NA
ALL RESIDENTIAL	29,674		36.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	29,674	66.0							
HEATING DEGREE DAYS		1,810							
EAST SOUTH CENTRAL									
KENTUCKY									
COLUMBIA GAS OF KENTUCKY					1981	527	155	695	-13
ALL RESIDENTIAL	102,925		30.7	50	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	102,201	91.6							
HEATING DEGREE DAYS		4,949							
UNION LIGHT, HEAT & POWER					1981	50	250	100	200
ALL RESIDENTIAL	55,896		36.0	90	1982	75	220	100	195
HOUSEHEATING ONLY	52,877	105.0							
HEATING DEGREE DAYS		5,486							
EQUITABLE GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	4,289		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	4,100	NA							
HEATING DEGREE DAYS		NA							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST SOUTH CENTRAL									
KENTUCKY									
LOUISVILLE GAS & ELECTRIC					1981	800	575	175	1,200
ALL RESIDENTIAL	215,030		NA	NA	1982	1,000	530	NA	NA
HOUSEHEATING ONLY	196,700	NA							
HEATING DEGREE DAYS		4,464							
DELTA NATURAL GAS CO.					1981	NA	7,000	NA	NA
ALL RESIDENTIAL	25,325		24.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	24,000	87.0							
HEATING DEGREE DAYS		4,897							
EAST SOUTH CENTRAL									
MISSISSIPPI									
ENTEX, INC.					1981	543	220	10	753
ALL RESIDENTIAL	97,589		32.0	90	1982	800	320	10	1,110
HOUSEHEATING ONLY	97,589	46.0							
HEATING DEGREE DAYS		2,550							
MISSISSIPPI VALLEY GAS CO.					1981	1,633	167	882	918
ALL RESIDENTIAL	192,407		31.2	93	1982	1,300	200	900	600
HOUSEHEATING ONLY	192,407	64.9							
HEATING DEGREE DAYS		2,646							
EAST SOUTH CENTRAL									
TENNESSEE									
KNOXVILLE UTILITIES BOARD					1981	NA	NA	NA	NA
ALL RESIDENTIAL	16,024		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	16,024	NA							
HEATING DEGREE DAYS		3,960							
MEMPHIS LIGHT GAS & WATER					1981	1,287	14	125	1,176
ALL RESIDENTIAL	215,092		30.0	78	1982	1,500	14	5	1,509
HOUSEHEATING ONLY	207,348	84.0							
HEATING DEGREE DAYS		2,846							
NASHVILLE GAS CO.					1981	216	296	167	345
ALL RESIDENTIAL	54,539		30.0	25	1982	216	330	167	379
HOUSEHEATING ONLY	52,903	90.0							
HEATING DEGREE DAYS		3,742							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
EAST SOUTH CENTRAL									
TENNESSEE									
UNITED CITIES GAS CO.					1981	692	NA	NA	NA
ALL RESIDENTIAL	22,970		21.0	NA	1982	700	NA	NA	NA
HOUSEHEATING ONLY	22,347	71.0							
HEATING DEGREE DAYS		3,742							
MIDDLE TENNESSEE NATURAL GAS					1981	110	160	19	251
ALL RESIDENTIAL	8,027		18.0	55	1982	100	180	20	260
HOUSEHEATING ONLY	7,625	78.0							
HEATING DEGREE DAYS		3,742							
JACKSON UTILITY DIVISION					1981	181	28	204	5
ALL RESIDENTIAL	14,681		23.0	75	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	14,319	70.0							
HEATING DEGREE DAYS		3,382							
WEST SOUTH CENTRAL									
ARKANSAS									
ARKANSAS LOUISIANA GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	336,082		34.8	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	336,082	60.9							
HEATING DEGREE DAYS		2,973							
ARKANSAS WESTERN GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	61,981		34.0	98	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	60,741	60.9							
HEATING DEGREE DAYS		4,401							
ARKANSAS OKLAHOMA GAS CORP.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	35,277		36.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	35,037	65.0							
HEATING DEGREE DAYS		3,341							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST SOUTH CENTRAL									
LOUISIANA									
ARKANSAS LOUISIANA GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	129,855		32.4	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	129,855	56.7							
HEATING DEGREE DAYS		2,280							
LOUISIANA GAS SERVICE CO.					1981	2,896	NA	NA	NA
ALL RESIDENTIAL	221,118		33.0	74	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	214,484	38.0							
HEATING DEGREE DAYS		1,208							
TRANS LOUISIANA GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	61,700		30.0	90	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	61,700	50.0							
HEATING DEGREE DAYS		2,016							
NEW ORLEANS PUBLIC SERVICE					1981	NA	NA	NA	NA
ALL RESIDENTIAL	163,303		NA	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	163,303	NA							
HEATING DEGREE DAYS		1,115							
ENTEX, INC.					1981	1,138	30	30	1,138
ALL RESIDENTIAL	126,146		31.0	80	1982	1,200	50	20	1,230
HOUSEHEATING ONLY	124,811	44.0							
HEATING DEGREE DAYS		1,670							
WEST SOUTH CENTRAL									
OKLAHOMA									
ARKANSAS LOUISIANA GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	105,006		30.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	105,006	53.9							
HEATING DEGREE DAYS		3,340							
ARKANSAS OKLAHOMA GAS CORP.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	12,554		36.0	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	12,554	53.0							
HEATING DEGREE DAYS		3,341							
LONE STAR GAS CO.					1981	400	16	50	366
ALL RESIDENTIAL	34,015		27.0	45	1982	410	16	60	366
HOUSEHEATING ONLY	26,769	60.0							
HEATING DEGREE DAYS		2,280							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
WEST SOUTH CENTRAL									
OKLAHOMA									
OKLAHOMA NATURAL GAS CO.					1981	13,483	400	73	13,810
ALL RESIDENTIAL	563,350		32.0	90	1982	12,800	150	100	12,850
HOUSEHEATING ONLY	562,535	67.0							
HEATING DEGREE DAYS		3,370							
WEST SOUTH CENTRAL									
TEXAS									
ARKANSAS LOUISIANA GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	54,064		27.3	NA	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	54,064	48.7							
HEATING DEGREE DAYS		2,198							
LONE STAR GAS CO.					1981	8,500	410	3,500	5,410
ALL RESIDENTIAL	1,040,755		27.0	45	1982	8,713	410	3,600	5,523
HOUSEHEATING ONLY	854,542	60.0							
HEATING DEGREE DAYS		2,280							
CITY PUBLIC SERVICE					1981	5,797	0	3,128	2,669
ALL RESIDENTIAL	247,918		30.5	83	1982	5,184	0	2,626	2,558
HOUSEHEATING ONLY	233,043	27.2							
HEATING DEGREE DAYS		1,470							
ENTEX, INC.					1981	19,026	350	70	19,376
ALL RESIDENTIAL	907,406		29.0	80	1982	20,500	700	80	21,120
HOUSEHEATING ONLY	890,580	37.0							
HEATING DEGREE DAYS		1,520							
ENERGAS CO.					1981	5,301	35	153	5,183
ALL RESIDENTIAL	243,157		46.0	93	1982	5,000	50	200	4,350
HOUSEHEATING ONLY	226,136	54.0							
HEATING DEGREE DAYS		3,037							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MOUNTAIN									
ARIZONA									
ARIZONA PUBLIC SERVICE CO.					1981	3,550	NA	4,016	NA
ALL RESIDENTIAL	315,578		10.3	55	1982	977	NA	NA	NA
HOUSEHEATING ONLY	291,352	44.9							
HEATING DEGREE DAYS		584							
CITIZENS UTILITIES CO.					1981	445	30	0	475
ALL RESIDENTIAL	4,679		33.6	75	1982	50	100	0	150
HOUSEHEATING ONLY	4,690	36.7							
HEATING DEGREE DAYS		2,962							
SOUTHWEST GAS CORP.					1981	2,968	48	90	2,926
ALL RESIDENTIAL	155,520		20.0	79	1982	3,117	34	27	3,124
HOUSEHEATING ONLY	153,624	29.0							
HEATING DEGREE DAYS		1,254							
MOUNTAIN									
COLORADO									
CITIZENS UTILITIES CO.					1981	63	24	87	0
ALL RESIDENTIAL	9,202		29.0	80	1982	71	27	10	88
HOUSEHEATING ONLY	9,202	66.0							
HEATING DEGREE DAYS		4,583							
CITY OF COLORADO SPRINGS					1981	2,469	NA	69	NA
ALL RESIDENTIAL	74,850		32.7	100	1982	2,543	NA	NA	NA
HOUSEHEATING ONLY	74,850	63.9							
HEATING DEGREE DAYS		5,435							
PUBLIC SERVICE OF COLORADO					1981	18,467	NA	NA	NA
ALL RESIDENTIAL	609,473		38.9	90	1982	23,600	NA	NA	NA
HOUSEHEATING ONLY	609,473	103.3							
HEATING DEGREE DAYS		4,784							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MOUNTAIN									
IDAHO									
WASHINGTON WATER POWER CO.					1981	215	221	214	222
ALL RESIDENTIAL	14,591		18.0	22	1982	170	150	200	120
HOUSEHEATING ONLY	12,496	78.0							
HEATING DEGREE DAYS		6,360							
INTERMOUNTAIN GAS CO.					1981	695	1,180	1,840	35
ALL RESIDENTIAL	84,827		19.1	44	1982	904	2,080	1,500	1,484
HOUSEHEATING ONLY	83,555	54.0							
HEATING DEGREE DAYS		6,060							
MOUNTAIN									
MONTANA									
GREAT FALLS GAS CO.					1981	10	0	37	-27
ALL RESIDENTIAL	20,439		52.0	98	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	20,030	73.5							
HEATING DEGREE DAYS		7,579							
MONTANA-DAKOTA UTILITIES CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	52,726		39.6	99	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	52,199	74.0							
HEATING DEGREE DAYS		5,956							
MONTANA POWER CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	90,421		44.0	68	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	90,421	72.0							
HEATING DEGREE DAYS		8,000							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MOUNTAIN									
NEW MEXICO									
GAS CO. OF NEW MEXICO					1981	6,178	234	0	6,412
ALL RESIDENTIAL	255,899		35.0	80	1982	6,765	259	0	7,024
HOUSEHEATING ONLY	255,899	98.0							
HEATING DEGREE DAYS		3,887							
MOUNTAIN									
NEVADA									
SOUTHWEST GAS CORP.					1981	4,756	208	5	4,959
ALL RESIDENTIAL	114,165		25.0	55	1982	4,850	194	9	5,035
HOUSEHEATING ONLY	110,411	62.0							
HEATING DEGREE DAYS		3,501							
MOUNTAIN									
UTAH									
MOUNTAIN FUEL SUPPLY CO.					1981	11,197	600	1,887	9,910
ALL RESIDENTIAL	381,760		38.8	95	1982	8,200	600	1,800	7,000
HOUSEHEATING ONLY	381,752	101.2							
HEATING DEGREE DAYS		5,316							
MOUNTAIN									
WYOMING									
MONTANA-DAKOTA UTILITIES CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	11,215		38.8	99	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	11,103	75.7							
HEATING DEGREE DAYS		6,049							
MOUNTAIN FUEL SUPPLY CO.					1981	1,211	395	105	1,501
ALL RESIDENTIAL	18,296		38.8	95	1982	1,285	100	100	1,285
HOUSEHEATING ONLY	18,296	162.0							
HEATING DEGREE DAYS		5,937							
WYOMING GAS CO.					1981	NA	NA	NA	NA
ALL RESIDENTIAL	5,351		36.0	95	1982	NA	NA	NA	NA
HOUSEHEATING ONLY	5,351	72.0							
HEATING DEGREE DAYS		6,897							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	GAS-HTD HOUSING UNIT ADDITIONS YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
MOUNTAIN									
WYOMING									
NORTHERN GAS DIVISION					1981	100	100	25	175
ALL RESIDENTIAL	41,845		36.0	90	1982	100	50	25	125
HOUSEHEATING ONLY	41,845	114.0							
HEATING DEGREE DAYS		6,559							
PACIFIC									
CALIFORNIA									
LONG BEACH GAS DEPT.					1981	800	NA	200	NA
ALL RESIDENTIAL	120,621		31.0	95	1982	800	NA	200	NA
HOUSEHEATING ONLY	113,873	24.0							
HEATING DEGREE DAYS		1,034							
PACIFIC GAS & ELECTRIC CO.					1981	33,782	NA	NA	NA
ALL RESIDENTIAL	2,717,753		12.0	88	1982	36,000	NA	NA	NA
HOUSEHEATING ONLY	2,670,000	61.0							
HEATING DEGREE DAYS		3,579							
SAN DIEGO GAS & ELECTRIC CO.					1981	7,300	NA	NA	NA
ALL RESIDENTIAL	488,619		29.0	77	1982	10,395	NA	NA	NA
HOUSEHEATING ONLY	376,700	29.0							
HEATING DEGREE DAYS		573							
SOUTHWEST GAS CORP.					1981	3,232	217	63	3,386
ALL RESIDENTIAL	52,051		25.0	79	1982	2,830	896	50	3,676
HOUSEHEATING ONLY	51,963	44.0							
HEATING DEGREE DAYS		6,248							
SOUTHERN CALIFORNIA GAS CO.					1981	78,600	1,771	5,836	74,535
ALL RESIDENTIAL	3,647,582		36.7	93	1982	92,465	2,100	4,700	89,865
HOUSEHEATING ONLY	3,319,300	49.1							
HEATING DEGREE DAYS		975							

DIVISION / STATE / COMPANY	CUSTOMERS YEAR-END	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) HEATING	CONSUMPTION PER SINGLE FAMILY HOME (MCF/YR) BASE-LOAD	GAS-HTD MKT SHARE (%)	YEAR	NEW CONST	CONVERSIONS	LESS LOSSES	NET ADDITIONS
PACIFIC									
OREGON									
NORTHWEST NATURAL GAS CO.					1981	4,022	6,562	4,151	6,433
ALL RESIDENTIAL	219,068		24.0	28	1982	3,800	6,815	3,660	6,955
HOUSEHEATING ONLY	203,079	48.0							
HEATING DEGREE DAYS		4,050							
PACIFIC									
WASHINGTON									
NORTHWEST NATURAL GAS CO.					1981	5	240	237	8
ALL RESIDENTIAL	5,322		24.0	12	1982	50	185	140	95
HOUSEHEATING ONLY	4,874	48.0							
HEATING DEGREE DAYS		4,050							
WASHINGTON WATER POWER CO.					1981	271	762	484	549
ALL RESIDENTIAL	51,731		18.0	34	1982	350	900	400	850
HOUSEHEATING ONLY	49,327	85.9							
HEATING DEGREE DAYS		6,360							
WASHINGTON NATURAL GAS CO.					1981	2,391	3,919	1,174	5,136
ALL RESIDENTIAL	249,219		NA	30	1982	NA	3,418	1,917	NA
HOUSEHEATING ONLY	222,702	NA							
HEATING DEGREE DAYS		4,464							

APPENDIX 2

COMPETITIVE FUEL PRICES
(as of December 31, 1981)

The information in this section presents the average delivered price (as of December 31, 1981) of competitive fuels distributed to residential customers, gas' principal competition in each market, and the average annual gas heating bill. The data reflect prices in the principal city served within each company's franchise area. Regional fuel prices for competitive fuels are listed at the end of each region. Prices are expressed in dollars per million Btu for comparison.

The prices for natural gas represent househeating use only and exclude baseload prices. Baseload consumption includes all domestic uses of gas (e.g., ranges, water heaters, and clothes dryers) except househeating and air conditioning. Moreover, baseload prices are generally higher than househeating prices because utilities charge more per unit of energy for small monthly consumption (baseload only) and less per unit of energy for large monthly consumption (baseload plus winter heating use).

The prices for electricity represent total electric use or the rate prevailing for 600 kwh per month and above.

The following conversion factors were used to convert reported data to Btu.

Conversion Factors

Natural Gas	1,000 cubic feet/million Btu
Fuel Oil #2	7.194 gallons/million Btu
Electricity	293.083 kwh/million Btu
Propane	10.917 gallons/million Btu

Information marked "NA" represents data not available or fuel not distributed.

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
NEW ENGLAND							
CONNECTICUT							
SOUTHERN CONNECTICUT GAS CO.	BRIDGEPORT	7.60	8.63	26.38	10.15	#2 OIL	784.00
CONNECTICUT NATURAL GAS	HARTFORD	6.47	8.98	23.42	9.93	#2 OIL	762.00
NORTHEAST UTILITIES	WATERBURY	7.47	8.99	22.33	7.64	#2 OIL	750.00
NEW ENGLAND							
MASSACHUSETTS							
BOSTON GAS CO.	BOSTON	6.41	9.23	27.84	10.37	#2 OIL	688.10
CAPE COD GAS CO.	CAPE COD	6.34	9.71	23.45	10.48	ELECTRIC	690.00
FALL RIVER GAS CO.	FALL RIVER	6.05	8.92	23.45	NA	#2 OIL	724.00
LOWELL GAS CO.	LOWELL	7.00	7.34	20.52	8.30	#2 OIL	720.00
BERKSHIRE GAS CO.	PITTSFIELD	5.80	9.35	21.98	9.17	#2 OIL	820.00
BAY STATE GAS CO.	SPRINGFIELD	7.38	8.27	23.45	9.61	#2 OIL	893.00
HAVERHILL GAS CO.	HAVERHILL	6.75	8.49	16.41	11.14	#2 OIL	770.00
NEW ENGLAND							
MAINE							
NORTHERN UTILITIES INC.	LEWISTON	5.60	8.63	19.96	10.92	ELECTRIC	688.00
NEW ENGLAND							
NEW HAMPSHIRE							
CONCORD NATURAL GAS CORP.	CONCORD	5.30	8.70	25.21	8.84	#2 OIL	583.00
GAS SERVICE, INC.	NASHUA	6.30	8.78	22.42	10.10	#2 OIL	532.68
MANCHESTER GAS CO.	MANCHESTER	6.13	8.49	27.84	10.04	#2 OIL	790.00
NORTHERN UTILITIES INC.	PORTSMOUTH	4.59	8.63	23.92	10.92	ELECTRIC	582.00
NEW ENGLAND							
RHODE ISLAND							
VALLEY GAS CO.	PAWTUCKET	7.06	9.06	29.31	10.04	#2 OIL	700.00

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31				PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
		NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE		
NEW ENGLAND							
VERMONT							
VERMONT GAS SYSTEMS	BURLINGTON	6.73	9.35	17.58	10.15	#2 OIL	715.40
NEW ENGLAND DIVISION		6.79	8.80	23.26	9.86		746.95
MIDDLE ATLANTIC							
NEW JERSEY							
SOUTH JERSEY GAS CO.	ATLANTIC CITY	5.77	8.99	21.28	12.01	ELECTRIC	717.00
NEW JERSEY NATURAL GAS CO.	ASBURY	5.43	8.63	23.45	10.92	#2 OIL	477.00
PUBLIC SERVICE ELEC. & GAS	NEWARK	6.14	8.63	16.97	NA	#2 OIL	623.00
MIDDLE ATLANTIC							
NEW YORK							
BROOKLYN UNION GAS CO.	NEW YORK	5.71	8.99	24.12	NA	#2 OIL	737.00
CENTRAL HUDSON GAS & ELEC.	POUGHKEEPSIE	5.28	9.21	29.02	3.85	#2 OIL	375.00
NIAGARA MOHAWK POWER CORP.	SYRACUSE	4.60	8.70	14.95	9.83	#2 OIL	455.00
CONSOLIDATED EDISON CO.	NEW YORK	5.66	9.21	33.12	NA	#2 OIL	684.38
NATIONAL FUEL DISTRIBUTION	BUFFALO	4.47	8.99	16.12	9.61	#2 OIL	481.23
LONG ISLAND LIGHTING CO.	LONG BEACH	5.40	9.28	27.21	10.48	#2 OIL	675.00
NEW YORK STATE ELEC. & GAS	ITHACA	4.21	8.85	14.95	9.60	#2 OIL	529.91
ROCHESTER GAS & ELECTRIC	ROCHESTER	4.81	9.06	15.83	8.95	ELECTRIC	530.00
ORANGE & ROCKLAND UTILITIES	CLARKSTOWN	5.13	8.63	33.46	NA	#2 OIL	520.65
COLUMBIA GAS OF NEW YORK	BINGHAMTON	4.71	8.18	20.72	10.65	ELECTRIC	437.00
MIDDLE ATLANTIC							
PENNSYLVANIA							
EQUITABLE GAS CO.	PITTSBURGH	4.57	8.63	14.36	NA	ELECTRIC	548.00
NATIONAL FUEL DISTRIBUTION	ERIE	4.13	8.60	18.11	9.32	#2 OIL	448.30
NORTH PENN GAS CO.	RURAL	4.42	8.38	14.07	9.83	#2 OIL	569.15
PEOPLES NATURAL GAS CO.	PITTSBURGH	4.16	8.63	14.07	9.93	ELECTRIC	457.60

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
PHILADELPHIA ELECTRIC CO.	CHESTER	5.15	8.99	18.80	10.04	ELECTRIC	620.00
PHILADELPHIA GAS WORKS	PHILADELPHIA	6.19	8.70	16.27	11.14		678.00
PIKE COUNTY LIGHT & POWER	MATAMORAS	4.37	8.63	23.53	NA	#2 OIL	469.85
UGI CORP.	READING	5.41	8.63	15.31	10.48	#2 OIL	427.42
COLUMBIA GAS OF PENNSYLVANIA	PITTSBURGH	4.54	8.42	11.34	7.64	ELECTRIC	480.00
MIDDLE ATLANTIC DIVISION		5.16	8.77	19.87	9.64		562.90
EAST NORTH CENTRAL ILLINOIS							
CENTRAL ILLINOIS LIGHT CO.	PEORIA	3.24	8.49	16.82	6.99	PROPANE	323.00
CENTRAL IL PUBLIC SERVICE	QUINCY	3.56	7.30	9.42	6.98	ELECTRIC	329.00
ILLINOIS POWER CO.	DECATUR	3.61	7.91	8.79	6.99	ELECTRIC	360.00
IOWA-ILLINOIS GAS & ELECTRIC	ROCK ISLAND	3.80	7.99	15.28	6.55	ELECTRIC	405.34
NORTH SHORE GAS CO.	WAUKEGAN	4.56	8.71	11.44	NA	ELECTRIC	615.00
PEOPLES GAS LIGHT & COKE	CHICAGO	4.17	8.28	12.28	NA	ELECTRIC	601.00
NORTHERN ILLINOIS GAS CO.	ROCKFORD	3.69	8.88	11.31	8.20	ELECTRIC	449.00
UNITED CITIES GAS CO.	VANDALIA	4.20	8.27	17.58	8.62	ELECTRIC	375.00
EAST NORTH CENTRAL INDIANA							
LAWRENCEBURG GAS CO.	LAWRENCEBURG	3.77	8.49	NA	8.30	ELECTRIC	413.00
CITIZENS GAS & COKE UTILITY	INDIANAPOLIS	3.84	9.28	9.09	8.08	ELECTRIC	426.00
HOOSIER GAS CORP.	VINCENNES	3.52	7.77	12.50	8.29	#2 OIL	334.00
INDIANA GAS CO.	MUNCIE	3.74	8.35	12.78	8.01	ELECTRIC	388.00
KOKOMO GAS & FUEL CO.	KOKOMO	3.72	8.13	12.31	7.64	#2 OIL	400.00
NORTHERN IN PUBLIC SERVICE	FORT WAYNE	3.65	8.32	14.12	8.06	ELECTRIC	365.75
OHIO VALLEY GAS CORP.	WINCHESTER	3.80	9.35	17.58	8.19	ELECTRIC	468.00
RICHMOND GAS CORP.	RICHMOND	3.69	8.55	13.19	7.71	ELECTRIC	506.70
SOUTHERN IN GAS & ELECTRIC	EVANSVILLE	3.46	8.63	11.81	7.19	ELECTRIC	410.00
EAST NORTH CENTRAL MICHIGAN							

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
BATTLE CREEK GAS CO.	BATTLE CREEK	3.68	8.84	16.41	7.96	#2 OIL	512.02
CONSUMERS POWER CO.	FLINT	3.65	8.63	15.91	8.19		458.00
SOUTHEASTERN MICHIGAN GAS	PORT HURON	4.24	8.60	16.52	8.25	#2 OIL	391.02
LAKE SUPERIOR DISTRICT POWER	IRONWOOD	4.73	8.41	13.16	8.28	#2 OIL	485.00
MICHIGAN CONSOLIDATED GAS	DETROIT	3.99	8.66	17.09	8.45	#2 OIL	544.00
MICHIGAN GAS UTILITIES CO.	MONROE	4.16	8.40	15.53	8.32	#2 OIL	451.62
WISCONSIN PUBLIC SERVICE	MENOMINEE	4.47	8.23	16.30	8.21	ELECTRIC	556.00
EAST NORTH CENTRAL — OHIO							
CINCINNATI GAS & ELECTRIC	CINCINNATI	4.29	8.49	14.44	8.30	ELECTRIC	418.00
DAYTON POWER & LIGHT CO.	DAYTON	4.65	7.84	15.12	8.14	#2 OIL	525.54
EAST OHIO GAS CO.	CLEVELAND	3.94	8.46	15.09	9.05	ELECTRIC	432.00
NATIONAL OIL & GAS CORP.	NEWARK	3.71	7.91	NA	NA	#2 OIL	334.00
NATIONAL FUEL DISTRIBUTION	ANDOVER	4.13	8.60	18.11	9.32	#2 OIL	459.70
OHIO GAS CO.	BRYAN	4.15	8.35	19.34	7.86	ELECTRIC	600.00
RIVER GAS CO.	MARIETTA	4.33	8.19	20.32	9.38	ELECTRIC	463.30
TOLEDO EDISON CO.	DEFIANCE	3.68	8.45	17.88	7.63	ELECTRIC	390.00
WEST OHIO GAS CO.	LIMA	4.76	8.05	11.72	9.54	ELECTRIC	530.70
COLUMBIA GAS OF OHIO	COLUMBUS	4.08	8.06	9.36	7.31	ELECTRIC	450.00
EAST NORTH CENTRAL — WISCONSIN							
LAKE SUPERIOR DISTRICT POWER	ASHLAND	4.77	8.41	17.38	8.28	#2 OIL	475.00
MADISON GAS & ELECTRIC	MADISON	5.21	8.27	14.36	7.75	#2 OIL	536.00
WISCONSIN GAS CO.	MILWAUKEE	4.99	8.27	15.91	7.96	#2 OIL	486.00
NORTHERN STATES POWER CO.	EAU CLAIRE	6.95	8.99	12.87	8.22	ELECTRIC	437.00
SUPERIOR WATER LIGHT & POWER	SUPERIOR	4.92	8.73	17.67	8.08	#2 OIL	549.00
WISCONSIN FUEL & LIGHT CO.	WAUSAU	4.84	5.68	16.30	8.78	#2 OIL	557.62
WISCONSIN POWER & LIGHT CO.	JANESVILLE	5.35	8.31	17.66	7.91	#2 OIL	593.00
WISCONSIN PUBLIC SERVICE	GREEN BAY	4.47	8.23	16.30	8.21	ELECTRIC	556.00
WISCONSIN SOUTHERN GAS CO.	LAKE GENEVA	4.50	8.49	17.58	7.42	ELECTRIC	439.00
EAST NORTH CENTRAL DIVISION		3.97	8.33	14.75	8.07		461.42

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
WEST NORTH CENTRAL							
IOWA							
IOWA ELECTRIC LIGHT & POWER	AMES	4.05	8.13	18.20	5.13	#2 OIL	305.71
IOWA-ILLINOIS GAS & ELECTRIC	DAVENPORT	3.59	7.99	13.13	6.55	ELECTRIC	343.60
IOWA POWER & LIGHT CO.	DES MOINES	4.33	8.32	11.28	6.70	ELECTRIC	461.00
IOWA PUBLIC SERVICE CO.	SIOUX CITY	3.61	8.12	16.30	7.19	PROPANE	408.00
NORTH CENTRAL PUBLIC SERVICE	FORT MADISON	4.60	8.35	16.41	6.77	ELECTRIC	470.00
WEST NORTH CENTRAL							
KANSAS							
ARKANSAS LOUISIANA GAS CO.	WICHITA	3.06	7.05	10.67	6.60	ELECTRIC	159.00
KANSAS POWER & LIGHT CO.	SALINA	2.80	7.91	13.48	7.10	ELECTRIC	150.60
WEST NORTH CENTRAL							
MINNESOTA							
AUSTIN UTILITIES	AUSTIN	4.20	7.77	18.11	6.66	#2 OIL	425.88
CITY OF DULUTH WATER & GAS	DULUTH	4.19	8.99	16.12	8.19	#2 OIL	635.00
MONTANA-DAKOTA UTILITIES CO.	CROOKSTON	6.70	8.13	14.95	7.75	ELECTRIC	573.00
NORTHERN STATES POWER CO.	ST. PAUL	4.14	8.56	8.56	8.08	ELECTRIC	394.00
NORTH CENTRAL PUBLIC SERVICE	CUON RAPIDS	4.21	7.48	18.17	7.75	ELECTRIC	412.00
MINNESOTA GAS CO.	MINNEAPOLIS	3.97	8.70	11.23	5.78	#2 OIL	542.00
WEST NORTH CENTRAL							
MISSOURI							
ST. JOSEPH LIGHT & POWER	MARYVILLE	5.20	8.27	10.55	6.77	ELECTRIC	390.00
MISSOURI PUBLIC SERVICE CO.	SEDALIA	2.94	8.20	8.43	6.55	PROPANE	187.00
MISSOURI UTILITIES CO.	CAPE GIRARDEAU	3.43	8.09	9.94	7.21	ELECTRIC	329.64
CITY OF SPRINGFIELD	SPRINGFIELD	4.30	7.01	11.02	6.76	NA	331.02
LACLEDE GAS CO.	ST. LOUIS	4.71	8.20	7.70	7.91	ELECTRIC	306.00
WEST NORTH CENTRAL							
NEBRASKA							

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31				PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
		NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE		
HASTINGS UTILITIES	HASTINGS	3.20	NA	16.12	NA	NA	350.20
IOWA PUBLIC SERVICE CO.	SIOUX CITY	3.63	8.12	NA	7.19	PROPANE	379.00
METROPOLITAN UTILITIES	OMAHA	3.92	8.11	8.68	7.19	ELECTRIC	270.00
NORTHWESTERN PUBLIC SERVICE	GRAND ISLAND	3.00	8.27	14.65	6.55	ELECTRIC	356.00
MINNESOTA GAS CO.	LINCOLN	4.54	7.70	14.69	7.38	ELECTRIC	550.00
WEST NORTH CENTRAL							
NORTH DAKOTA							
MONTANA-DAKOTA UTILITIES CO.	BISMARCK	3.34	8.56	14.83	7.10	PROPANE	311.00
NORTHERN STATES POWER CO.	FARGO	6.33	8.20	8.56	7.98	ELECTRIC	613.00
WEST NORTH CENTRAL							
SOUTH DAKOTA							
IOWA PUBLIC SERVICE CO.	YANKTON	3.60	8.34	9.23	6.43	PROPANE	388.00
MONTANA-DAKOTA UTILITIES CO.	RAPID CITY	3.75	8.13	16.06	7.78	#2 OIL	244.00
NORTHWESTERN PUBLIC SERVICE	HURON	4.55	8.06	17.00	6.77	PROPANE	410.01
MINNESOTA GAS CO.	SIOUX FALLS	4.23	8.96	15.24	7.04	ELECTRIC	435.00
WEST NORTH CENTRAL DIVISION		4.07	8.13	13.19	7.03		375.58
SOUTH ATLANTIC							
DISTRICT OF COLUMBIA							
WASHINGTON GAS LIGHT CO.	WASHINGTON	5.49	9.27	13.18	10.81	ELECTRIC	504.78
SOUTH ATLANTIC							
DELAWARE							
CHESAPEAKE UTILITIES CORP.	DOVER	8.64	8.35	21.16	8.35	#2 OIL	357.35
DELMARVA POWER & LIGHT CO.	WILMINGTON	5.37	8.77	16.47	9.61	ELECTRIC	652.43

DIVISION / STATE	COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
SOUTH ATLANTIC								
FLORIDA								
	FLORIDA PUBLIC UTILITIES CO.	PALM BEACH	6.18	8.92	18.46	11.19	ELECTRIC	60.00
	PEOPLES GAS SYSTEM, INC.	MIAMI	5.22	7.63	19.64	11.68	ELECTRIC	67.48
SOUTH ATLANTIC								
GEORGIA								
	ATLANTA GAS LIGHT CO.	ATLANTA	3.91	8.99	14.19	7.97	ELECTRIC	179.40
	GAS LIGHT OF COLUMBUS	COLUMBUS	4.67	7.27	16.44	8.19	ELECTRIC	245.00
	UNITED CITIES GAS CO.	GAINESVILLE	4.80	8.27	14.65	8.62	ELECTRIC	375.00
SOUTH ATLANTIC								
MARYLAND								
	CHESAPEAKE UTILITIES CORP.	SALISBURY	8.64	8.35	21.16	8.35	ELECTRIC	357.35
	BALTIMORE GAS & ELECTRIC	BALTIMORE	5.19	8.76	15.01	6.02	ELECTRIC	451.00
	WASHINGTON GAS LIGHT CO.	HYATTSVILLE	4.92	9.27	14.72	10.81	ELECTRIC	551.54
	COLUMBIA GAS OF MARYLAND	HAGERSTOWN	5.09	8.63	14.74	9.55	ELECTRIC	427.00
SOUTH ATLANTIC								
NORTH CAROLINA								
	PIEDMONT NATURAL GAS CO.	CHARLOTTE	5.33	8.06	15.56	8.72	ELECTRIC	475.00
	PUBLIC SERVICE OF NC	RALEIGH	4.78	8.56	16.27	8.95	ELECTRIC	592.00
	UNITED CITIES GAS CO.	HENDERSONVILLE	5.90	8.27	14.65	8.62	ELECTRIC	500.00
	NORTH CAROLINA NATURAL GAS	FAYETTEVILLE	4.90	7.91	17.58	8.41	ELECTRIC	347.00
SOUTH ATLANTIC								
SOUTH CAROLINA								
	PIEDMONT NATURAL GAS CO.	GREENVILLE	4.96	7.91	14.16	8.72	ELECTRIC	399.00
	COMMISSION OF PUBLIC WORKS	GREENWOOD	4.51	8.56	9.96	9.61	#2 OIL	283.00
	PEOPLES NATURAL GAS OF SC	FLORENCE	4.95	8.85	17.58	9.33	ELECTRIC	278.00
	UNITED CITIES GAS CO.	GAFFNEY	4.90	8.27	14.65	8.62	ELECTRIC	380.00

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
SOUTH ATLANTIC							
VIRGINIA							
CITY OF CHARLOTTESVILLE	CHARLOTTESVILLE	5.13	8.27	17.58	8.72	ELECTRIC	350.00
CITY OF DANVILLE	DANVILLE	3.93	8.39	12.10	8.41	ELECTRIC	296.88
CITY OF RICHMOND	RICHMOND	5.01	8.99	16.03	8.19	ELECTRIC	526.52
ROANOKE GAS CO.	ROANOKE	4.87	8.78	13.77	7.86	ELECTRIC	519.00
UNITED CITIES GAS CO.	BRISTOL	3.75	8.27	13.19	8.62	ELECTRIC	500.00
COLUMBIA GAS OF VIRGINIA	STAUNTON	3.59	8.06	17.09	8.77	ELECTRIC	333.00
WASHINGTON GAS LIGHT CO.	ALEXANDRIA	4.91	9.27	13.70	10.81	ELECTRIC	416.51
SOUTH ATLANTIC							
WEST VIRGINIA							
EQUITABLE GAS CO.	GRAFTON	4.73	NA	NA	NA	ELECTRIC	468.00
HOPE NATURAL GAS CO.	PARKERSBURG	5.16	8.63	15.33	12.45	ELECTRIC	487.79
COLUMBIA GAS OF WV	CHARLESTON	4.75	8.09	11.37	8.19	ELECTRIC	424.00
SOUTH ATLANTIC DIVISION		4.71	8.47	15.53	9.11		362.90
EAST SOUTH CENTRAL							
ALABAMA							
ALABAMA GAS CORP.	BIRMINGHAM	4.50	7.91	14.65	8.52	ELECTRIC	350.00
MOBILE GAS SERVICE CORP.	MOBILE	4.62	8.63	16.85	8.73	ELECTRIC	216.00
DECATUR UTILITIES GAS	DECATUR	3.99	7.84	11.72	6.77	ELECTRIC	268.79
CITY OF FLORENCE	FLORENCE	4.43	8.63	11.72	8.19	ELECTRIC	101.89
SOUTHEAST ALABAMA GAS	ANDALUSIA	4.40	7.19	19.26	7.89	ELECTRIC	280.00
EAST SOUTH CENTRAL							
KENTUCKY							
COLUMBIA GAS OF KENTUCKY	LEXINGTON	4.99	7.72	12.75	9.22	ELECTRIC	361.00
UNION LIGHT, HEAT & POWER	COVINGTON	4.38	8.49	12.42	8.30	ELECTRIC	432.00
EQUITABLE GAS CO.	RURAL	NA	NA	NA	NA	NA	NA

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
LOUISVILLE GAS & ELECTRIC	LOUISVILLE	3.33	8.33	9.61	8.41	ELECTRIC	293.46
DELTA NATURAL GAS CO.	WINCHESTER	4.33	7.91	13.19	8.52	ELECTRIC	321.70
EAST SOUTH CENTRAL							
MISSISSIPPI							
ENTEX, INC.	GULFPORT	4.40	NA	19.64	7.64	ELECTRIC	190.00
MISSISSIPPI VALLEY GAS CO.	JACKSON	4.05	7.14	14.98	8.19	ELECTRIC	262.85
EAST SOUTH CENTRAL							
TENNESSEE							
KNOXVILLE UTILITIES BOARD	KNOXVILLE	4.17	7.11	12.31	8.50	ELECTRIC	400.00
MEMPHIS LIGHT GAS & WATER	MEMPHIS	3.35	6.98	13.60	10.92	NA	271.00
NASHVILLE GAS CO.	NASHVILLE	3.19	7.77	13.24	8.89	ELECTRIC	290.00
UNITED CITIES GAS CO.	COLUMBIA	3.50	8.27	13.19	8.62	ELECTRIC	315.00
MIDDLE TENNESSEE NATURAL GAS	SMITHVILLE	4.90	8.20	12.90	8.90	ELECTRIC	420.00
JACKSON UTILITY DIVISION	JACKSON	3.63	8.05	13.19	8.52	ELECTRIC	254.00
EAST SOUTH CENTRAL DIVISION		4.06	7.89	13.84	8.51		298.14
WEST SOUTH CENTRAL							
ARKANSAS							
ARKANSAS LOUISIANA GAS CO.	LITTLE ROCK	3.34	7.05	11.08	7.42	ELECTRIC	170.00
ARKANSAS WESTERN GAS CO.	FAYETTEVILLE	3.01	NA	19.05	7.31	ELECTRIC	323.76
ARKANSAS OKLAHOMA GAS CORP.	FORT SMITH	2.21	NA	8.74	6.77	ELECTRIC	150.00
WEST SOUTH CENTRAL							
LOUISIANA							
ARKANSAS LOUISIANA GAS CO.	SHREVEPORT	4.10	7.03	9.67	8.41	ELECTRIC	184.00
LOUISIANA GAS SERVICE CO.	GRETNA	3.26	6.11	15.35	NA	ELECTRIC	160.19
TRANS LOUISIANA GAS CO.	LAFAYETTE	4.35	NA	17.15	NA	ELECTRIC	215.00

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
NEW ORLEANS PUBLIC SERVICE	NEW ORLEANS	3.85	NA	11.46	NA	ELECTRIC	NA
ENTEX, INC.	LAKE CHARLES	4.40	NA	19.64	7.64	ELECTRIC	193.00
WEST SOUTH CENTRAL							
OKLAHOMA							
ARKANSAS LOUISIANA GAS CO.	LAWTON	3.34	7.15	12.60	6.98	ELECTRIC	158.00
ARKANSAS OKLAHOMA GAS CORP.		1.86	NA	11.67	6.77	ELECTRIC	102.00
LONE STAR GAS CO.	DURANT	2.99	NA	17.29	8.95	ELECTRIC	189.36
OKLAHOMA NATURAL GAS CO.	OKLAHOMA CITY	3.10	NA	10.55	6.88	ELECTRIC	203.68
WEST SOUTH CENTRAL							
TEXAS							
ARKANSAS LOUISIANA GAS CO.	TEXARKANA	3.34	7.27	10.74	8.52	ELECTRIC	130.00
LONE STAR GAS CO.	DALLAS	3.94	NA	20.49	8.95	ELECTRIC	237.73
CITY PUBLIC SERVICE	SAN ANTONIO	4.81	NA	17.44	7.86	ELECTRIC	114.97
ENTEX, INC.	HOUSTON	4.40	NA	19.64	7.64	ELECTRIC	165.00
ENERGAS CO.	LUBBOCK	3.03	NA	11.20	7.86	ELECTRIC	282.00
WEST SOUTH CENTRAL DIVISION		3.80	6.92	13.96	7.71		194.22
MOUNTAIN							
ARIZONA							
ARIZONA PUBLIC SERVICE CO.	PHOENIX	4.52	8.42	18.56	12.01	ELECTRIC	213.00
CITIZENS UTILITIES CO.	NOGALES	5.44	8.49	20.52	9.50	PROPANE	199.65
SOUTHWEST GAS CORP.	TUCSON	4.98	7.34	15.06	9.78	ELECTRIC	139.00
MOUNTAIN							
COLORADO							
CITIZENS UTILITIES CO.	LA JUNTA	4.02	7.98	16.12	6.88	PROPANE	245.00
CITY OF COLORADO SPRINGS	COLORADO SPRINGS	3.99	7.87	11.37	8.29	NA	277.99

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
PUBLIC SERVICE OF COLORADO	DENVER	4.09	7.05	18.76	7.86	ELECTRIC	250.75
MOUNTAIN / IDAHO							
WASHINGTON WATER POWER CO.	LEWISTON	5.13	8.85	6.26	12.66	#2 OIL	400.29
INTERMOUNTAIN GAS CO.	BOISE	6.30	8.12	10.15	8.67	ELECTRIC	347.00
MOUNTAIN / MONTANA							
GREAT FALLS GAS CO.	GREAT FALLS	4.28	8.56	8.65	8.73	ELECTRIC	314.58
MONTANA-DAKOTA UTILITIES CO.	BILLINGS	3.96	7.99	8.53	8.29	ELECTRIC	215.00
MONTANA POWER CO.	MISSOULA	4.39	8.05	8.51	7.74	ELECTRIC	443.13
MOUNTAIN / NEW MEXICO							
GAS CO. OF NEW MEXICO	ALBUQUERQUE	3.65	7.91	24.91	8.19	ELECTRIC	358.05
MOUNTAIN / NEVADA							
SOUTHWEST GAS CORP.	LAS VEGAS	4.89	7.68	18.11	10.16	ELECTRIC	356.00
MOUNTAIN / UTAH							
MOUNTAIN FUEL SUPPLY CO.	SALT LAKE	2.56	7.77	14.18	7.75	ELECTRIC	355.76
MOUNTAIN / WYOMING							
MONTANA-DAKOTA UTILITIES CO.	SHERIDAN	3.49	8.70	5.86	6.77	ELECTRIC	255.00
MOUNTAIN FUEL SUPPLY CO.	ROCK SPRINGS	2.02	8.68	10.98	8.10	ELECTRIC	399.07

DIVISION / STATE / COMPANY	PRINCIPAL CITY SERVED	ALL PRICES IN DOLLARS PER MILLION BTU AS OF DECEMBER 31 — NATURAL GAS	FUEL OIL NO. 2	ELECTRIC	PROPANE	PRINCIPAL COMPETITIVE FUEL	AVERAGE ANNUAL GAS HTG BILL($)
WYOMING GAS CO.	WORLAND	3.53	8.27	9.49	7.64	ELECTRIC	270.00
NORTHERN GAS DIVISION	CASPER	3.92	NA	10.98	NA	ELECTRIC	447.00
MOUNTAIN DIVISION		4.01	8.10	13.17	8.77		293.24
PACIFIC							
CALIFORNIA							
LONG BEACH GAS DEPT.	LONG BEACH	2.90	NA	21.25	6.55	ELECTRIC	69.60
PACIFIC GAS & ELECTRIC CO.	SAN FRANCISCO	NA	NA	NA	NA	NA	245.00
SAN DIEGO GAS & ELECTRIC CO.	SAN DIEGO	NA	NA	NA	NA	NA	97.00
SOUTHWEST GAS CORP.	VICTORVILLE	7.65	7.64	24.62	9.76	ELECTRIC	382.00
SOUTHERN CALIFORNIA GAS CO.	LOS ANGELES	3.39	7.14	19.05	6.28	ELECTRIC	150.00
PACIFIC							
OREGON							
NORTHWEST NATURAL GAS CO.	PORTLAND	6.30	8.11	11.51	9.12	ELECTRIC	290.00
PACIFIC							
WASHINGTON							
NORTHWEST NATURAL GAS CO.	VANCOUVER	6.30	8.11	6.56	9.12	ELECTRIC	290.00
WASHINGTON WATER POWER CO.	SPOKANE	5.12	8.85	6.42	12.66	#2 OIL	439.92
WASHINGTON NATURAL GAS CO.	SEATTLE	6.14	9.34	7.56	10.00	ELECTRIC	473.00
PACIFIC DIVISION		3.76	8.20	13.85	9.07		200.19